

Short Physical Performance Battery (SPPB) as a frailty measure

Scoring: SPPB scores range from zero to 12 possible points. SPPB score of 3-9 points in persons with possible sarcopenia but no mobility disability indicates frailty; SPPB score of 10 or greater for persons with no sarcopenia and no mobility disability indicates robustness. Persons with a score of 2 or lower who have sarcopenia, potential cachexia, and mobility disability are determined to be disabled.

Frailty Criterion	Definition
Usual Gait Speed	<p><u>Gait Speed Test:</u> person attempts walk a 4-meter course at their usual speed, just as if walking down the street to go to the store.</p> <ul style="list-style-type: none"> • 0 points if unable to do the walk • 1 point if time is more than 8.70 sec • 2 points if time is 6.21 to 8.70 sec • 3 points if time is 4.82 to 6.20 sec • 4 points if time is less than 4.82 sec <p>Equipment: walking course; stopwatch. Average of 2 attempts.</p>
Repeated Chair Stands	<p><u>Chair Stand Test:</u> person attempts to rise from a chair five times without using their arms.</p> <ul style="list-style-type: none"> • 0 points if unable to complete 5 chair stands or completes stands in >60 seconds • 1 point if chair stand time is 16.70 sec or more • 2 points if chair stand time is 13.70 to 16.69 sec or more • 3 points if chair stand time is 11.20 to 13.69 sec • 4 points if chair stand time is 11.19 sec or less <p>Equipment: chair; stopwatch.</p>
Standing Balance	<p>Three balance tests are performed and scored as follows:</p> <p><u>Side-by-side stand:</u> person attempts to stand with feet together, side-by-side, for 10 seconds.</p> <ul style="list-style-type: none"> • 1 point if held for 10 seconds • 0 points if not held for 10 seconds or not attempted <p><u>Semi-tandem stand:</u> person attempts to stand with the side of the heel of one foot touching the big toe of the other foot for 10 seconds.</p> <ul style="list-style-type: none"> • 1 point if held for 10 seconds • 0 points if not held for 10 seconds or not attempted <p><u>Tandem stand:</u> person attempts to stand with the heel of one foot in front of and touching the toes of the other foot for about 10 seconds.</p> <ul style="list-style-type: none"> • 2 points if held for 10 seconds • 1 point if held for 3 to 9.99 seconds • 0 points if held for <3 seconds or not attempted <p>Equipment: stopwatch.</p>

References:

Cesari M, Landi F, Calvani R, et al. Rationale for a preliminary operational definition of physical frailty and sarcopenia in the SPRINTT trial. *Aging Clin Exp Res.* 2017;29(1):81-88.

Guralnik JM, Simonsick EM, Ferrucci L, et al. A short physical performance battery assessing lower extremity function: association with self-reported disability and prediction of mortality and nursing home admission. *J Gerontol.* 1994 Mar 1;49(2):M85-94.