

Short Physical Performance Battery

The Short Physical Performance Battery (SPPB) is an objective assessment tool for evaluating lower extremity functioning in older persons.

- Developed by the National Institute on Aging
- Has a strong evidence base to support its validity as a valuable objective measure
- Important to stick to the protocol to have standardised measures
- Powerful predictor of many outcomes – mortality, hospitalization, nursing home admissions, risk of disability into the future – considerations for intervention to prevent regression of physical ability
- Broken into three different parts for the testing
 - Balance
 - Walking Speed
 - Chair Stand

TIPS for Completing the SPPB

BALANCE:

- Demonstrate how to use your arms, bend your knees or move your body to maintain your balance, but try not to move your feet.
- Exaggerate the movements to show the participant what to do
- Provide support to get into the starting position, holding their arm
- Stand to the side and slightly behind them, hold onto their elbow
- Are you ready, then “Ready, Begin”
- Progression is Side-by-side, then Semi-tandem, then Tandem

WALK:

This is the single strongest predictor of future function

- Measure out 4m walking course
- Instruction – provide before demonstrating to ensure it is heard
- Walk to the other end of the course at your usual speed as if you’re walking down the street to go to the shop. Walk all the way past the other end before you stop
- Don’t start timing until they first move (different to chair rise)
- Don’t stop the timing until one of their feet has entirely crossed the end line
- Repeat in the opposite direction then record the fastest time
- Stand on the side of the client opposite to the hand holding the stop watch, but behind them out of view so you don’t influence their pace.

REPEATED CHAIR STAND TEST:

- Do single chair stand first – arms across chest
- In the repeated test – emphasize the *Quickly As You Can* when both demonstrating and instructing the activity
- Count out loud when they complete the stand and sit but don't say it before they complete the movement as you will have a pacing effect
- If they start to fatigue or falter – ask '*Can you continue?*'
- Non-attempted vs Unable to do the test
 - Very different outcomes, and a distinction important to record
 - Do they feel unsafe? Or they can't be bothered

Classification of limitations Based on Short Physical Performance Score

Score Classification¹

1. 0-3 Severe limitations
2. 4-6 Moderate limitations
3. 7-9 Mild limitations
4. 10-12 Minimal limitations

¹ Guralnik JM, Ferrucci L, Simonsick EM, Salive ME, Wallace RB. Lower-extremity function in persons over the age of 70 years as a predictor of subsequent disability. *N Engl J Med.* 1995;332:556-