

Fullerton Advanced Balance Scale

(Long-form version)

Patient's name: _____ Date of birth: _____ Sex: _____

Examiner's name: _____ Date of test: _____

Test item	Equipment	Safety procedures	Testing procedures	Verbal instruction	Scoring categories
1. Stand with feet together and eyes closed	Stopwatch with lanyard (for placing around neck)	<ol style="list-style-type: none"> Position the person being tested in a corner (If available) or close to a wall. Stand close to the patient in case of loss of balance. Hold watch at eye level so patient and time can be monitored simultaneously. 	<ol style="list-style-type: none"> Demonstrate the correct test position and then instruct the patient to move their feet independently until they are together. If the patient is unable to achieve the correct position due to lower extremity joint problems, encourage them to bring their heels together even though the front of the feet are not touching. Have the patient adopt a position that will ensure their safety as they fold their arms across their chests and prepare to close their eyes. Begin timing as soon as the patient closes their eyes. (Instruct patient to open their eyes if they feel so unsteady that a loss of balance is imminent.) 	<p>“Bring your feet together, fold your arms across your chest, close your eyes when you are ready, and remain as steady as possible until I instruct you to open your eyes.”</p>	<ul style="list-style-type: none"> • (0) Unable to obtain the correct standing position independently. • (1) Able to obtain the correct standing position independently but unable to maintain the position or keep the eyes closed for at least 10 seconds. • (2) Able to maintain the correct standing position with eyes closed for more than 10 seconds but less than 30 seconds. • (3) Able to maintain the correct standing position with eyes closed for 30 seconds but requires close supervision. • (4) Able to maintain the correct standing position safely with eyes closed for 30 seconds.
2. Reach forward to retrieve an object (pencil) held at shoulder height with outstretched arm	12" ruler and pencil	<ol style="list-style-type: none"> Position the patient facing out from the corner (If available) or close to the wall. Position yourself to the side of the patient's outstretched hand. Use an arm-holding pencil in the horizontal position to manually assist the patient if a loss of balance occurs. 	<ol style="list-style-type: none"> Provide the patient with a sagittal view of the desired movement. Instruct the patient to raise the preferred arm to 90 degrees and extend it with fingers outstretched. Measure 10 inches from the end of the fingers of the outstretched arm with the ruler. Hold the object (pencil) horizontally and level with the height of the patient's shoulder. Be sure not to move the pencil once the instructions are provided. Instruct the patient to reach forward, grasp the pencil, and return to the initial starting position without moving the feet, if possible. (It is acceptable to raise the heels as long as the feet do not move while reaching for the pencil.) If the patient is unable to reach the pencil within 2-3 seconds of initiating the forward lean, indicate to the patient that it is okay to move the feet in order to reach the pencil. Count the number of steps taken by the patient in order to retrieve the pencil. 	<p>“Try to lean forward to take the pencil from my hand and return to your starting position without moving your feet from their present position.”</p>	<ul style="list-style-type: none"> • (0) Unable to reach the pencil without taking >2 steps. • (1) Able to reach the pencil but needs to take 2 steps. • (2) Able to reach the pencil but needs to take 1 step. • (3) Can reach the pencil without moving the feet but requires supervision. • (4) Can reach the pencil safely and independently without moving the feet.

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3. Turn 360 degrees in right and left directions	None	<ol style="list-style-type: none"> 1. Position the person being tested about one foot in front of a wall and facing you. 2. Stand close enough during the test to provide manual assistance if a loss of balance occurs. 	<ol style="list-style-type: none"> 1. Verbally explain and then demonstrate the task to be performed, making sure to complete each circle in four steps or less and pause briefly between turns. 2. Instruct the patient (who is facing you) to turn in a complete circle in one direction, pause, and then turn in a complete circle in the opposite direction. 3. Count the number of full steps taken to complete each circle. 4. Stop counting steps as soon as the patient is facing you after completing each turn. 5. Allow for a small correction in foot position before a turn in the opposite direction is initiated. 	<p>“Turn around in a full circle, pause, and then turn in a second full circle in the opposite direction.”</p>	<ul style="list-style-type: none"> • (0) Needs manual assistance while turning. • (1) Needs close supervision or verbal cueing while turning. • (2) Able to turn 360 but takes more than 4 steps in both directions. • (3) Able to turn 360 but unable to complete in a4 steps in 1 direction. • (4) Able to turn 360 safely and takes a4 steps in both directions.
4. Step up onto and over a 6-inch bench	6-inch-high bench (18- by 18-inch stepping surface)	<ol style="list-style-type: none"> 1. Position the bench close to a wall and self on the opposite side of the bench. 2. Adopt a close supervisory position and move with the patient as she/he steps up and over the bench in each direction. 	<ol style="list-style-type: none"> 1. Verbally explain the movement to be performed before demonstrating the step up onto and over the bench (at normal speed) in both directions. 2. Instruct the patient to step onto the bench with the right foot, swing the left leg directly up and over the bench, and step off the other side. 3. Then, repeat the movement in the opposite direction, with the left leg leading the action. 4. Encourage the patient not to touch the wall or to maintain balance during the test. 5. During the performance of the test item, watch to see that the patient’s trailing leg (a) does not make contact with the bench or (b) swing around, as opposed to directly up and over, the bench. 6. Verbally cue which leg should be leading the action just prior to the start of the movement in each direction. 	<p>“Step up onto the bench with your right leg, swing your left leg directly up and over the bench, and step off on the other side. Repeat the movement in the opposite direction with your left leg as your leading leg.”</p>	<ul style="list-style-type: none"> • (0) Unable to step onto the bench without loss of balance or manual assistance. • (1) Able to step up onto the bench with leading leg, but trailing leg contacts bench or leg swings around bench during the swing-through phase in both directions. • (2) Able to step up onto the bench with the leading leg, but trailing leg contacts bench or swings around the bench during the swing-through phase in 1 direction. • (3) Able to complete the step up and over in both directions but requires close supervision in 1 or both directions. • (4) Able to complete the step up and over in both directions safely and independently.

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<p>6. Stand on one leg</p>	<p>Stopwatch and lanyard</p>	<ol style="list-style-type: none"> 1. Position the patient being tested In a corner (If one is available) or close to a wall. 2. Stand In a close supervisory position and on the side of the raised leg. 	<ol style="list-style-type: none"> 1. Instruct the patient to fold the arms across the chest, lift one leg off the floor, and maintain balance until instructed to return the foot to the floor. 2. Begin timing as soon as the patient lifts the foot from the floor. 3. Stop timing if the legs touch, the raised leg contacts the floor, or the patient lifts the arms off the chest before 20 seconds have elapsed. 4. Allow the patient to perform the test a second time with the other leg raised if they touch down quickly on the first attempt or are unsure which leg should be raised. 	<p>“Fold your arms across your chest, lift your preferred leg off the floor, without touching your other leg, and stand with your eyes open as long as you can.”</p>	<ul style="list-style-type: none"> • (0) Unable to try or needs assistance to prevent falling. • (1) Able to lift leg independently but unable to maintain position for >5 seconds. • (2) Able to lift leg independently and maintain position for >5 but <12 seconds. • (3) Able to lift leg independently and maintain position for >12 but <20 seconds. • (4) Able to lift leg independently and maintain position for the full 20 seconds.
<p>7. Stand on foam, eyes closed</p>	<p>Stopwatch and lanyard; two Airex® pads, with a length of nonslip material placed between the two pads and an additional length of nonslip material between the floor and the first pad if the test is being performed on an uncarpeted surface.</p>	<ol style="list-style-type: none"> 1. Position the person to be tested in a corner (if one is available) or close to a wall. 2. After demonstrating the test item, place the Airex® pads in front of the person standing in a corner. 3. Adopt a close supervisory position and hold a watch at a height that allows for simultaneous monitoring of the patient's arm position and eyes as well as the time. 4. Instruct the patient to open their eyes if she/he feels so unsteady that a loss of balance is imminent. Manually assist the patient off the foam pads if he/she appears unsteady. 	<ol style="list-style-type: none"> 1. Following a demonstration of the task, instruct the patient to step up onto the foam pads without assistance, position the feet shoulder-width apart, fold the arms across the chest, and close the eyes when ready. 2. Begin timing as soon as the eyes close. 3. Stop the trial if the patient (a) opens the eyes before the timing period has elapsed, (b) lifts the arms off the chest, or (c) loses balance and requires manual assistance to prevent falling. 4. Instruct the patient to step forward off the foam at the completion of the test item. Provide manual assistance if needed. 	<p>“Step up onto the foam and stand with your feet shoulder-width apart. Fold your arms over your chest, and close your eyes when you are ready. I will tell you when to open your eyes.”</p>	<ul style="list-style-type: none"> • (0) Unable to step onto foam and/or maintain standing position independently with eyes open. • (1) Able to step onto foam independently and maintain standing position but unable or unwilling to close eyes. • (2) Able to step onto foam independently and maintain standing position with eyes closed for <10 seconds. • (3) Able to step onto foam independently and maintain standing position with eyes closed for >10 seconds but <20 seconds. • (4) Able to step onto foam independently and maintain standing position with eyes closed for 20 seconds.

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Skip test item #8 if test item #4 was not safely completed. Score a zero and proceed to the next item.					
8. Two-footed jump for distance.	6-inch ruler; masking tape	<ol style="list-style-type: none"> 1. Position the patient close to a wall and adopt a close supervisory position during the jump. 2. Demonstrate the jump but do not jump more than twice the length of your own feet. 3. Stand to the side of the patient and move forward as he or she jumps. 4. As soon as the patient's feet contact the ground following the jump, place your hand on his/her back to steady him/her. 	<ol style="list-style-type: none"> 1. Instruct the patient to jump as far but as safely as possible while performing a two-footed jump (i.e., leave the floor with two feet and land on two feet). 2. Demonstrate the correct movement prior to the patient performing the jump. 3. Use the ruler to measure the length of the foot and then multiply by two to determine the ideal distance to be jumped. 4. Observe whether the patient leaves the floor with both feet and lands with both feet. 5. Position the ruler on the floor on the opposite side of the patient and close to the wall so that you can glance down and see how far the patient jumped. 	<p>“Try to jump as far but as safely as you can with both feet.”</p>	<ul style="list-style-type: none"> • (0) Unwilling or unable to attempt or attempts to initiate 2-footed jump but 1 or both feet do not leave the floor. • (1) Able to initiate 2-footed jump but one foot leaves the floor or lands before the other. • (2) Able to perform 2-footed jump but unable to jump further than the length of their own feet. • (3) Able to perform 2-footed jump and achieve a distance greater than the length of their own feet. • (4) Able to perform 2-footed jump and achieve a distance greater than twice the length of their own feet.
9. Walk with head turns	Metronome set at 100 beats per minute	<ol style="list-style-type: none"> 1. Position yourself directly behind the patient during the standing portion of the test item so you can clearly see how far the head turns in either direction. 2. During the walking portion of this test item, move to a position behind and slightly to the side of the patient. 3. Stand close enough that you can provide manual assistance if the patient becomes unstable while walking. 	<ol style="list-style-type: none"> 1. After first demonstrating the test item, ask the patient to practice turning the head in time with the metronome while standing in place. 2. Watch to see that the patient is turning the head the required distance to both sides and at the required speed. 3. Provide verbal cueing if the patient is not performing the head turns correctly. 4. Once the patient appears to have the correct head-turning rhythm (after no more than 4 to 6 head turns), 5. Instruct them to begin walking forward. The head turns should be to the beat of the metronome. 6. Begin counting steps as soon as the patient begins to walk forward with head turns. 7. Observe whether the patient deviates from a straight path while walking or is unable to turn the head the required distance (in one or both directions) and/or at the required speed. 8. If the patient is unable to achieve the correct head-turning rhythm while standing, it is highly unlikely they will be able to achieve it while walking (making the scoring of the test item a little easier). 9. Also, in most cases, the steps will be synchronized with the head turns, making the counting of 10 steps easier. 	<p>“Walk forward while turning your head from left to right with each beat of the metronome. I will tell you when to stop.”</p>	<ul style="list-style-type: none"> • (0) Unable to walk 10 steps independently while performing 30 head turns at an established pace. • (1) Able to walk 10 steps independently but unable to perform 30 head turns at an established pace. • (2) Able to walk 10 steps but veers from a straight line while performing 30 head turns at an established pace. • (3) Able to walk 10 steps in a straight line while performing head turns at an established pace but head turns < 30 in one or both directions. • (4) Able to walk 10 steps in a straight line while performing 30 head turns at established pacing.

Test item	Equipment	Safety procedures	Testing procedures	Verbal instruction	Scoring categories
10. Reactive postural control	None	<ol style="list-style-type: none"> 1. Position the patient approximately 3-4 feet in front of a wall. 2. Stand immediately behind the patient and adopt a wide base of support during the learning portion of the test. 3. Be ready to move your feet quickly once you release your hand and the patient begins to lose balance. 4. Flex the elbow and release your hand as soon as you determine that the patient is exerting sufficient pressure against your hand to require that he/she must step backwards one or more times to restore balance. 5. This release should be unexpected, so do not prepare the patient for the moment of release or allow the patient to lean too far back onto your hand before releasing it. 	<ol style="list-style-type: none"> 1. Instruct the patient to stand with his or her back to you. 2. Extend your arm with the elbow locked and place the palm of your hand in the middle of the patient's back. 3. Instruct the patient to lean back slowly against your hand until you tell him or her to stop. 4. Quickly flex your elbow until your hand is no longer in contact with the patient's back at the moment you estimate that a sufficient amount of force has been applied to require a movement of the feet to restore balance. 5. Try to quickly release your hand while you are still giving the verbal instructions. 	<p>"Slowly lean back into my hand until I ask you to stop."</p>	<ul style="list-style-type: none"> • (0) Unable to maintain upright balance; no observable attempt to step; requires manual assistance to restore balance. • (1) Unable to maintain upright balance; takes more than 2 steps and requires manual assistance to restore balance. • (2) Unable to maintain upright balance; takes more than 2 steps but is able to restore balance independently. • (3) Unable to maintain upright balance; takes 2 steps but is able to restore balance independently. • (4) Unable to maintain upright balance but able to restore balance independently with only 1 step.
Total score:					/40

Scoring

The test includes 10 balance activities, each rated on a 5-point scale from 0 to 4, with higher scores showing better performance. Total scores range from 0 to 40, and **scores of 25 or below suggest a high risk of falls.**

Remarks

Rose, D. J. (2010). *Fallproof!: A comprehensive balance and mobility training program* (2nd ed., pp. 61–66). Human Kinetics.

Rose, D. J., Lucchese, N., & Wiersma, L. D. (2006). Development of a multidimensional balance scale for use with functionally independent older adults. *Archives of Physical Medicine and Rehabilitation*, 87(11), 1478–1485. <https://doi.org/10.1016/j.apmr.2006.07.263>