The Activities-specific Balance Confidence (ABC) Scale*

Administration:
The ABC can be self-administered or administered via personal or telephone interview. Larger typeset should be used for self-administration, while an enlarged version of the rating scale on an index card will facilitate in-person interviews. Regardless of method of administration, each respondent should be queried concerning their understanding of instructions, and probed regarding difficulty answering specific items.

Instructions to Participants:
For each of the following, please indicate your level of confidence in doing the activity without losing your balance or becoming unsteady from choosing one of the percentage points on the scale form 0% to 100%. If you do not currently do the activity in question, try and imagine how confident you would be if you had to do the activity. If you normally use a walking aid to do the activity or hold onto someone, rate your confidence as it you were using these supports. If you have any questions about answering any of these items, please ask the administrator.

Instructions for Scoring:
The ABC is an 11-point scale and ratings should consist of whole numbers (0-100) for each item. Total the ratings (possible range = 0 – 1600) and divide by 16 to get each subject's ABC score. If a subject qualifies his/her response to items #2, #9, #11, #14 or #15 (different ratings for "up" vs. "down" or "onto" vs. "off"), solicit separate ratings and use the lowest confidence of the two (as this will limit the entire activity, for instance the likelihood of using the stairs.)

*Powell, LE & Myers AM. The Activities-specific Balance Confidence (ABC) Scale. *J Gerontol Med Sci* 1995; 50(1): M28-34

The Activities-specific Balance Confidence (ABC) Scale*

For each of the following activities, please indicate your level of self-confidence by choosing a corresponding number from the following rating scale:

0% 10 20 30 40 50 60 70 80 90 100%
no confidence completely confident

"How confident are you that you will not lose your balance or become unsteady when you…

1. …walk around the house? ____%
2. …walk up or down stairs? ____%
3. …bend over and pick up a slipper from the front of a closet floor ____%
4. …reach for a small can off a shelf at eye level? ____%
5. …stand on your tiptoes and reach for something above your head? ____%
6. …stand on a chair and reach for something? ____%
7. …sweep the floor? ____%
8. …walk outside the house to a car parked in the driveway? ____%
9. …get into or out of a car? ____%
10. …walk across a parking lot to the mall? ____%
11. …walk up or down a ramp? ____%
12. …walk in a crowded mall where people rapidly walk past you? ____%
13. …are bumped into by people as you walk through the mall?____%
14. … step onto or off an escalator while you are holding onto a railing? ____%
15. … step onto or off an escalator while holding onto parcels such that you cannot hold onto the railing? ____%
16. …walk outside on icy sidewalks? ____%

*Powell, LE & Myers AM. The Activities-specific Balance Confidence (ABC) Scale. *J Gerontol Med Sci* 1995; 50(1): M28-34

Functional Reach*

Directions:
Using a yardstick mounted on the wall at shoulder height, ask the subject to position themselves close to, but not touching the wall with their arm outstretched and hand fisted. Take note of the starting position by determining what number the MCP joints line up with on the yardstick. Have the subject reach as far forward as possible in a plane parallel with the measuring device. Instruct them to "Reach as far forward as you can without taking a step." They are free to use various reaching strategies. Take note of the end position of the MCP joints against the ruler, and record the difference between the starting and ending position numbers. If they move their feet, that trial must be discarded and the trial repeated. Guard the subject as the task is performed to prevent a fall. Subjects are given two practice trials, and then their performance on an additional three trials is recorded and averaged. Scores less than 6 or 7 inches indicate limited functional balance. Most health individuals with adequate functional balance can reach 10 inches or more.

Instructions to the patient:
Please reach as far forward as you can without losing your balance. Keep your feet on the floor. You are not allowed to touch the wall or the ruler as you reach. You will have two practice trials and then I will record the distance that you reach forward.

Criteria to stop the test:
The patient's feet lifted up from the floor or they fell forward. Most patients fall forward with this test. The therapist should guard from the front as that is the direction that you reach forward.

*Duncan P, Weiner D, Chandler J, et al. Functional reach: a new clinical measure of balance. *J of Gerontol* 1990; 45: M192-197.

Timed "Up and Go"*

Directions:
The timed "Up and Go" test measures, in seconds, the time taken by an individual to stand up from a standard arm chair (approximate seat height of 46 cm, arm height 65 cm), walk a distance of 3 meters (approximately 10 feet), turn, walk back to the chair, and sit down. The subject wears their regular footwear and uses their customary walking aid (none, cane, walker). No physical assistance is given. They start with their back against the chair, their arms resting on the armrests, and their walking aid at hand. They are instructed that, on the word "go" they are to get up and walk at a comfortable and safe pace to a line on the floor 3 meters away, turn, return to the chair and sit down again. The subject walks through the test once before being timed in order to become familiar with the test. Either a stopwatch or a wristwatch with a second hand can be used to time the trial.

Instructions to the patient:
"When I say 'go' I want you to stand up and walk to the line, turn and then walk back to the chair and sit down again. Walk at your normal pace."

Variations:
You may have the patient walk at a fast pace to see how quickly they can ambulate. Also you could have them turn to the left and to the right to test any differences.

*Podsiadlo D, Richardson S. The timed "up and go": a test of basic functional mobility for frail elderly persons. *JAGS* 1991; 39: 142-148.

Tinetti Performance Oriented Mobility Assessment*

Description:
The Tinetti assessment tool is an easily administered task-oriented test that measures an older adult's gait and balance abilities.

Equipment needed: Hard armless chair
Stopwatch or wristwatch
15 ft walkway

Completion:

Time: 10-15 minutes

Scoring: A three-point ordinal scale, ranging from 0-2. "0" indicates the highest level of impairment and "2" the individuals independence.
Total Balance Score = 16
Total Gait Score = 12
Total Test Score = 28

Interpretation:
25-28 = low fall risk
19-24 = medium fall risk
< 19 = high fall risk

* Tinetti ME. Performance-oriented assessment of mobility problems in elderly patients. *JAGS* 1986; 34: 119-126. (Scoring description: PT Bulletin Feb. 10, 1993)

Tinetti Performance Oriented Mobility Assessment

Balance Tests

Initial instructions: Subject is seated in hard, armless chair. The following maneuvers are tested.

1.	**Sitting Balance**	Leans or slides in chair	=0	
		Steady, safe	=1	_____
2.	**Arises**	Unable without help	=0	
		Able, uses arms to help	=1	
		Able without using arms	=2	_____
3.	**Attempts to Arise**	Unable without help	=0	
		Able, requires > 1 attempt	=1	
		Able to rise, 1 attempt	=2	_____
4.	**Immediate Standing Balance** (first 5 seconds)			
	Unsteady (swaggers, moves feet, trunk sway)		=0	
	Steady but uses walker or other support		=1	
	Steady without walker or other support		=2	_____
5.	**Standing Balance**			
	Unsteady		=0	
	Steady but wide stance(medial heals > 4 inches apart) and uses cane or other support		=1	
	Narrow stance without support		=2	_____
6.	**Nudged** (subject at maximum position with feet as close together as possible, examiner pushes lightly on subject's sternum with palm of hand 3 times)			
		Begins to fall	=0	
		Staggers, grabs, catches self	=1	
		Steady	=2	_____
7.	**Eyes Closed** (at maximum position of item 6)			
		Unsteady	=0	
		Steady	=1	_____
8.	**Turing 360 Degrees**	Discontinuous steps	=0	
		Continuous steps	=1	_____
		Unsteady (grabs, staggers)	=0	
		Steady	=1	_____
9.	**Sitting Down**			
	Unsafe (misjudged distance, falls into chair)		=0	
	Uses arms or not a smooth motion		=1	
	Safe, smooth motion		=2	_____

BALANCE SCORE: _____/16

Tinetti Performance Oriented Mobility Assessment

Gait Tests

Initial Instructions: Subject stands with examiner, walks down hallway or across room, first at "usual" pace, then back at "rapid, but safe" pace (using usual walking aids)

10. **Initiation of Gait** (immediately after told to "go"
    - Any hesitancy or multiple attempts to start =0
    - No hesitancy =1 _____

11. **Step Length and Height**

    a. Right swing foot
    - Does not pass left stance foot with step =0
    - Passes left stance foot =1 _____
    - Right foot does not clear floor completely With step =0
    - Right foot completely clears floor =1 _____

    b. Left swing foot
    - Does not pass right stance foot with step =0
    - Passes right stance foot =1 _____
    - Left foot does not clear floor completely With step =0
    - Left foot completely clears floor =1 _____

12. **Step Symmetry**
    - Right and left step length not equal (estimate) =0
    - Right and left step length appear equal =1 _____

13. **Step Continuity**
    - Stopping or discontinuity between steps =0
    - Steps appear continuous =1 _____

14. **Path** (estimated in relation to floor tiles, 12-inch diameter; observe excursion of 1 foot over about 10 ft. of the course)
    - Marked deviation =0
    - Mild/moderate deviation or uses walking aid =1
    - Straight without walking aid =2 _____

15. **Trunk**
    - Marked sway or uses walking aid =0
    - No sway but flexion of knees or back or Spreads arms out while walking =1
    - No sway, no flexion, no use of arms, and no Use of walking aid =2 _____

16. **Walking Stance**
    - Heels apart =0
    - Heels almost touching while walking =1 _____

GAIT SCORE = _____/12

BALANCE SCORE = _____/16

TOTAL SCORE (Gait + Balance) = _____/28

{> 19 high fall risk, 19-24 medium fall risk, 25-28 low fall risk}

Tinetti Performance Oriented Mobility Assessment	Date	Date	Date	Date
Balance Tests: Subject is seated on hard, armless chair				
SITTING BALANCE Leans or slides in chair =0, Steady, safe =1				
ARISES Unable without help =0; Able, uses arms =1, Able without using arms = 2				
ATTEMPTS TO RISE: Unable w/o help=0; Able, requires > 1 attempt =1; Able in 1 attempt =2				
IMMEDIATE STANDING BALANCE (first 5 seconds) Unsteady (sway/stagger/feet move)=0; Steady, w/ support =1;Steady w/o support =2				
STANDING BALANCE Unsteady =0; Steady, stance > 4 inch BOS & requires support =1; Narrow stance, w/o support =2				
STERNAL NUDGE (feet close together) Begins to fall =0; Staggers, grabs, catches self =1; Steady =2				
EYES CLOSED (feet close together) Unsteady =0; Steady =1				
TURNING 360 DEGREES Discontinuous steps =0; Continuous steps =1				
TURNING 360 DEGREES Unsteady (staggers, grabs) =0;Steady =1				
SITTING DOWN Unsafe (misjudges distance, falls) =0;Uses arms, or not a smooth motion =1; Safe, smooth motion =2				
BALANCE SCORE TOTAL	/16	/16	/16	/16
GAIT INITATION (immediate after told "go) Any hesitancy, multiple attempts to start =0; No hesitancy =1				
STEP LENGTH R swing foot passes L stance leg =1; L swing foot passes R =1				
FOOT CLEARANCE R foot completely clears floor =1; L foot completely clears floor =1				
STEP SYMMETRY R and L step length unequal =0; R and L step length equal=1				
STEP CONTINUITY Stop/discontinuity between steps =0; Steps appear continuous =1				
PATH (excursion) Marked deviation =0; Mild/moderate deviation or use of aid =1; Straight without device=2				
TRUNK Marked sway or uses device =0; No sway but knee or trunk flexion or spread arms while walking =1; None of the above deviations=2				
BASE OF SUPPORT Heels apart =0; Heels close while walking =1				
GAIT SCORE TOTAL	/12	/12	/12	/12
ASSISTIVE DEVICE				
TOTAL SCORE (BALANCE + GAIT)	/28	/28	/28	/28
FALL RISK (minimal >23, Mod. 19-23, High < 18)				
Therapist initials				

Berg Balance Scale

Description:
14-item scale designed to measure balance of the older adult in a clinical setting.

Equipment needed: Ruler
2 standard chairs (one with arm rests, one without)
Footstool or step
Stopwatch or wristwatch
15 ft walkway

Completion:

Time: 15-20 minutes

Scoring: A five-point ordinal scale, ranging from 0-4. "0" indicates the lowest level of function and "4" the highest level of function.
Total Score = 28

Interpretation:
41-56 = low fall risk
21-40 = medium fall risk
0 –20 = high fall risk
< 36 fall risk close to 100%

Berg Balance Scale

Name: _____ Date: _____

Location: _____ Rater: _____

	ITEM DESCRIPTION	SCORE (0-4)
1.	Sitting to standing	_____
2.	Standing unsupported	_____
3.	Sitting unsupported	_____
4.	Standing to sitting	_____
5.	Transfers	_____
6.	Standing with eyes closed	_____
7.	Standing with feet together	_____
8.	Reaching forward with outstretched arm	_____
9.	Retrieving object from floor	_____
10.	Turning to look behind	_____
11.	Turning 360 degrees	_____
12.	Placing alternate foot on stool	_____
13.	Standing with one foot in front	_____
14.	Standing on one foot	_____
	Total	_____

GENERAL INSTRUCTIONS
Please document each task and/or give instructions as written. When scoring, please record the lowest response category that applies for each item.

In most items, the subject is asked to maintain a given position for a specific time. Progressively more points are deducted if the time or distance requirements are note met, if the subject's performance warrants supervision, or if the subject touches an external support or receives assistance from the examiner. Subject should understand that they must maintain their balance while attempting the tasks. The choices of which leg to stand on or how far to reach are left to the subject. Poor judgment will adversely influence the performance and the scoring.

Equipment required for testing is a stopwatch or watch with a second hand, and a ruler or other indicator of 2, 5, and 10 inches. Chairs used during testing should be a reasonable height. Either a step or a stool of average step height may be used for item # 12.

Berg Balance Scale

1. SITTING TO STANDING
   INSTRUCTIONS: Please stand up. Try not to use your hand for support.
   ( ) 4 able to stand without using hands and stabilize independently
   ( ) 3 able to stand independently using hands
   ( ) 2 able to stand using hands after several tries
   ( ) 1 needs minimal aid to stand or stabilize
   ( ) 0 needs moderate or maximal assist to stand

2. STANDING UNSUPPORTED
   INSTRUCTIONS: Please stand for two minutes without holding on.
   ( ) 4 able to stand safely for 2 minutes
   ( ) 3 able to stand 2 minutes with supervision
   ( ) 2 able to stand 30 seconds unsupported
   ( ) 1 needs several tries to stand 30 seconds unsupported
   ( ) 0 unable to stand 30 seconds unsupported

If a subject is able to stand 2 minutes unsupported, score full points for sitting unsupported. Proceed to item #4.

3. SITTING WITH BACK UNSUPPORTED BUT FEET SUPPORTED ON FLOOR OR ON A STOOL
   INSTRUCTIONS: Please sit with arms folded for 2 minutes.
   ( ) 4 able to sit safely and securely for 2 minutes
   ( ) 3 able to sit 2 minutes under supervision
   ( ) 2 able to able to sit 30 seconds
   ( ) 1 able to sit 10 seconds
   ( ) 0 unable to sit without support 10 seconds

4. STANDING TO SITTING
   INSTRUCTIONS: Please sit down.
   ( ) 4 sits safely with minimal use of hands
   ( ) 3 controls descent by using hands
   ( ) 2 uses back of legs against chair to control descent
   ( ) 1 sits independently but has uncontrolled descent
   ( ) 0 needs assist to sit

5. TRANSFERS
   INSTRUCTIONS: Arrange chair(s) for pivot transfer. Ask subject to transfer one way toward a seat with armrests and one way toward a seat without armrests. You may use two chairs (one with and one without armrests) or a bed and a chair.
   ( ) 4 able to transfer safely with minor use of hands
   ( ) 3 able to transfer safely definite need of hands
   ( ) 2 able to transfer with verbal cuing and/or supervision
   ( ) 1 needs one person to assist
   ( ) 0 needs two people to assist or supervise to be safe

6. STANDING UNSUPPORTED WITH EYES CLOSED
   INSTRUCTIONS: Please close your eyes and stand still for 10 seconds.
   ( ) 4 able to stand 10 seconds safely
   ( ) 3 able to stand 10 seconds with supervision
   ( ) 2 able to stand 3 seconds
   ( ) 1 unable to keep eyes closed 3 seconds but stays safely
   ( ) 0 needs help to keep from falling

7. STANDING UNSUPPORTED WITH FEET TOGETHER
   INSTRUCTIONS: Place your feet together and stand without holding on.
   ( ) 4 able to place feet together independently and stand 1 minute safely
   ( ) 3 able to place feet together independently and stand 1 minute with supervision
   ( ) 2 able to place feet together independently but unable to hold for 30 seconds
   ( ) 1 needs help to attain position but able to stand 15 seconds feet together
   ( ) 0 needs help to attain position and unable to hold for 15 seconds

Berg Balance Scale continued…..

8. REACHING FORWARD WITH OUTSTRETCHED ARM WHILE STANDING
INSTRUCTIONS: Lift arm to 90 degrees. Stretch out your fingers and reach forward as far as you can. (Examiner places a ruler at the end of fingertips when arm is at 90 degrees. Fingers should not touch the ruler while reaching forward. The recorded measure is the distance forward that the fingers reach while the subject is in the most forward lean position. When possible, ask subject to use both arms when reaching to avoid rotation of the trunk.)
( ) 4 can reach forward confidently 25 cm (10 inches)
( ) 3 can reach forward 12 cm (5 inches)
( ) 2 can reach forward 5 cm (2 inches)
( ) 1 reaches forward but needs supervision
( ) 0 loses balance while trying/requires external support

9. PICK UP OBJECT FROM THE FLOOR FROM A STANDING POSITION
INSTRUCTIONS: Pick up the shoe/slipper, which is place in front of your feet.
( ) 4 able to pick up slipper safely and easily
( ) 3 able to pick up slipper but needs supervision
( ) 2 unable to pick up but reaches 2-5 cm(1-2 inches) from slipper and keeps balance independently
( ) 1 unable to pick up and needs supervision while trying
( ) 0 unable to try/needs assist to keep from losing balance or falling

10. TURNING TO LOOK BEHIND OVER LEFT AND RIGHT SHOULDERS WHILE STANDING
INSTRUCTIONS: Turn to look directly behind you over toward the left shoulder. Repeat to the right. Examiner may pick an object to look at directly behind the subject to encourage a better twist turn.
( ) 4 looks behind from both sides and weight shifts well
( ) 3 looks behind one side only other side shows less weight shift
( ) 2 turns sideways only but maintains balance
( ) 1 needs supervision when turning
( ) 0 needs assist to keep from losing balance or falling

11. TURN 360 DEGREES
INSTRUCTIONS: Turn completely around in a full circle. Pause. Then turn a full circle in the other direction.
( ) 4 able to turn 360 degrees safely in 4 seconds or less
( ) 3 able to turn 360 degrees safely one side only 4 seconds or less
( ) 2 able to turn 360 degrees safely but slowly
( ) 1 needs close supervision or verbal cuing
( ) 0 needs assistance while turning

12. PLACE ALTERNATE FOOT ON STEP OR STOOL WHILE STANDING UNSUPPORTED
INSTRUCTIONS: Place each foot alternately on the step/stool. Continue until each foot has touch the step/stool four times.
( ) 4 able to stand independently and safely and complete 8 steps in 20 seconds
( ) 3 able to stand independently and complete 8 steps in > 20 seconds
( ) 2 able to complete 4 steps without aid with supervision
( ) 1 able to complete > 2 steps needs minimal assist
( ) 0 needs assistance to keep from falling/unable to try

13. STANDING UNSUPPORTED ONE FOOT IN FRONT
INSTRUCTIONS: (DEMONSTRATE TO SUBJECT) Place one foot directly in front of the other. If you feel that you cannot place your foot directly in front, try to step far enough ahead that the heel of your forward foot is ahead of the toes of the other foot. (To score 3 points, the length of the step should exceed the length of the other foot and the width of the stance should approximate the subject's normal stride width.)
( ) 4 able to place foot tandem independently and hold 30 seconds
( ) 3 able to foot ahead independently and hold 30 seconds
( ) 2 able to take small step independently and hold 30 seconds
( ) 1 needs help to step but can hold 15 seconds
( ) 0 loses balance while stepping or standing

14. STANDING ON ONE LEG
INSTRUCTIONS: Stand on one leg as long as you can without holding on.
( ) 4 able to lift leg independently and hold > 10 seconds
( ) 3 able to lift leg independently and hold 5-10 seconds
( ) 2 able to lift leg independently and hold ≥ 3 seconds
( ) 1 tries to lift leg unable to hold 3 seconds but remains standing independently.
( ) 0 unable to try of needs assist to prevent fall

( ) TOTAL SCORE (Maximum = 56)

Physical Performance Test

Testing Protocol:
Administer the test as outlined below. Subjects are given up to two chances to complete each item. Assistive devices are permitted for tasks 6 – 9.

1. Ask the subject, when given the command to "go" to write the sentence "whales live in the blue ocean." Time from the word "go" until the pen is lifted from the page at the end of the sentence. All words must be included and legible. Period need not be included for task to be considered completed.
2. Five kidney beans are placed in a bowl, 5 inches from the edge of the desk in front of the patient. An empty coffee can is placed on the table at the patient's non-dominant side. A teaspoon is place in the patient's dominant hand. Ask the subject on the command "go" to pick up the beans, one at a time and place each in the coffee can. Time from the command "go" until the last bean is heard hitting the bottom of the can.
3. Place a Physician's Desk Reference or other heavy book on a table in front of the patient. Ask the patient, when given the command "go" to place the book on a shelf above shoulder level. Time from the command "go" to the time the book is resting on the shelf.
4. If the subject has a jacket cardigan sweater, ask them to remove it. If not, give the subject a lab coat. Ask the subject, on the command "go" to put the coat on completely such that it is straight on their shoulders and then remove the garment completely. Time from the command "go" until the garment has been complexly removed.
5. Place a penny approximately1 foot from the patient's foot on the dominant side. Ask the patient, on the command "go" to pick up the penny from the floor and stand up. Time from the command "go" until the subject is standing erect with a penny in hand.
6. With subject in a corridor or in and open room, ask the subject to turn 360 degrees. Evaluate using the scale on PPT scoring sheet.
7. Bring subject to start on a 50 –foot walk test course (25 feet out and 25 feet back) and ask the subject, on the command "go" to walk to the 25-foot mark and back. Time from the command "go" until the starting line is crossed on the way back.
8. Bring subject to foot of stairs (nine to 12 steps) and ask subject, on the command "go" to begin climbing stairs until they feel tired and wishes to stop. Before beginning this task, alert the subject to the possibility of developing chest pain or shortness of breath and inform the subject to tell you if any of these symptoms occur. Escort the subject up the stairs. Time from the command "go" until the subjects' first foot reaches the top of the first flight of stairs. Record the number of flights (maximum is four) completed (up and down is one flight).

Physical Performance Test

Scoring Sheet

			Time	Scoring	Score
1.	Write a sentence. (Whales live in the blue ocean.)	Seconds		≤ 10 sec = 4 10.5-15 sec = 3 15.5 – 20 sec = 2 >20 sec = 1 unable = 0	
2.	Simulated eating	Seconds		≤ 10 sec = 4 10.5-15 sec = 3 15.5 – 20 sec = 2 >20 sec = 1 unable = 0	
3.	Lift a book and put it on a shelf Book PDR 1988: 5.5 lbs Bed height 59 cm Shelf height 118 cm All sitting with feet on floor	Seconds		≤ 2 sec = 4 2.5- 4 sec = 3 4.5 – 6 sec = 2 > 6 sec = 1 unable = 0	
4.	Put on and remove a jacket 1. Standing 2. Use of bathrobe; button down shirt; hospital gown.	Seconds		≤ 10 sec = 4 10.5-15 sec = 3 15.5 – 20 sec = 2 >20 sec = 1 unable = 0	
5.	Pick up a penny from floor.	Seconds		≤ 2 sec = 4 2.5- 4 sec = 3 4.5 – 6 sec = 2 > 6 sec = 1 unable = 0	
6.	Turn 360 degrees		Discontinuous steps = 0 Continuous steps = 2		
			Unsteady (grabs, staggers) = 0 Steady = 2		
7.	50-foot walk test. Starting sitting for instructions.	Seconds		≤ 15 sec = 4 15.5- 20 sec = 3 20.5 – 25 sec = 2 >25 sec = 1 unable = 0	
8.	Climb one flight of stairs.+	Seconds		≤ 5 sec = 4 5.5- 10 sec = 3 10.5 – 15 sec = 2 >15 sec = 1 unable = 0	
9.	Climb stairs.+		Number of flights of stairs up and down (maximum 4)		
	TOTAL SCORE (maximum 36 for nine-item, 28 for seven-item)				
	(*Round time measurements to nearest 0.5 seconds.) (+ omit for 7 item test)			9-item score	

Dynamic Gait Index*

Description:
Developed to assess the likelihood of falling in older adults.
This scale was designed to test eight facets of gait.

Equipment needed: Box (Shoebox)
Cones (2)
Stairs

Completion:

Time: 15 minutes

Scoring: A four-point ordinal scale, ranging from 0-3. "0" indicates the lowest level of function and "3" the highest level of function.
Total Score = 24

Interpretation: < 19 = predictive of falls in the elderly
> 22 = safe ambulators

*Shumway-Cook A, Woollacott M. *Motor Control Theory and Applications*, Williams and Wilkins Baltimore, 1995: 323-324

Dynamic Gait Index

1. Gait level surface _____

Instructions: Walk at your normal speed from here to the next mark (20')
Grading: Mark the lowest category that applies.

(3) Normal: Walks 20', no assistive devices, good sped, no evidence for imbalance, normal gait pattern
(2) Mild Impairment: Walks 20', uses assistive devices, slower speed, mild gait deviations.
(1) Moderate Impairment: Walks 20', slow speed, abnormal gait pattern, evidence for imbalance.
(0) Severe Impairment: Cannot walk 20' without assistance, severe gait deviations or imbalance.

2. Change in gait speed _____

Instructions: Begin walking at your normal pace (for 5'), when I tell you "go," walk as fast as you can (for 5'). When I tell you "slow," walk as slowly as you can (for 5').
Grading: Mark the lowest category that applies.

(3) Normal: Able to smoothly change walking speed without loss of balance or gait deviation. Shows a significant difference in walking speeds between normal, fast and slow speeds.
(2) Mild Impairment: Is able to change speed but demonstrates mild gait deviations, or not gait deviations but unable to achieve a significant change in velocity, or uses an assistive device.
(1) Moderate Impairment: Makes only minor adjustments to walking speed, or accomplishes a change in speed with significant gait deviations, or changes speed but has significant gait deviations, or changes speed but loses balance but is able to recover and continue walking.
(0) Severe Impairment: Cannot change speeds, or loses balance and has to reach for wall or be caught.

3. Gait with horizontal head turns _____

Instructions: Begin walking at your normal pace. When I tell you to "look right," keep walking straight, but turn your head to the right. Keep looking to the right until I tell you, "look left," then keep walking straight and turn your head to the left. Keep your head to the left until I tell you "look straight," then keep walking straight, but return your head to the center.
Grading: Mark the lowest category that applies.

(3) Normal: Performs head turns smoothly with no change in gait.
(2) Mild Impairment: Performs head turns smoothly with slight change in gait velocity, i.e., minor disruption to smooth gait path or uses walking aid.
(1) Moderate Impairment: Performs head turns with moderate change in gait velocity, slows down, staggers but recovers, can continue to walk.
(0) Severe Impairment: Performs task with severe disruption of gait, i.e., staggers outside 15" path, loses balance, stops, reaches for wall.

4. Gait with vertical head turns _____

Instructions: Begin walking at your normal pace. When I tell you to "look up," keep walking straight, but tip your head up. Keep looking up until I tell you, "look down," then keep walking straight and tip your head down. Keep your head down until I tell you "look straight," then keep walking straight, but return your head to the center.
Grading: Mark the lowest category that applies.

(3) Normal: Performs head turns smoothly with no change in gait.
(2) Mild Impairment: Performs head turns smoothly with slight change in gait velocity, i.e., minor disruption to smooth gait path or uses walking aid.
(1) Moderate Impairment: Performs head turns with moderate change in gait velocity, slows down, staggers but recovers, can continue to walk.
(0) Severe Impairment: Performs task with severe disruption of gait, i.e., staggers outside 15" path, loses balance, stops, reaches for wall.

Dynamic Gait Index continued….

5. Gait and pivot turn _____
Instructions: Begin walking at your normal pace. When I tell you, "turn and stop," turn as quickly as you can to face the opposite direction and stop.
Grading: Mark the lowest category that applies.
(3) Normal: Pivot turns safely within 3 seconds and stops quickly with no loss of balance.
(2) Mild Impairment: Pivot turns safely in > 3 seconds and stops with no loss of balance.
(1) Moderate Impairment: Turns slowly, requires verbal cueing, requires several small steps to catch balance following turn and stop.
(0) Severe Impairment: Cannot turn safely, requires assistance to turn and stop.

6. Step over obstacle ____
Instructions: Begin walking at your normal speed. When you come to the shoebox, step over it, not around it, and keep walking.
Grading: Mark the lowest category that applies.
(3) Normal: Is able to step over the box without changing gait speed, no evidence of imbalance.
(1) Mild Impairment: Is able to step over box, but must slow down and adjust steps to clear box safely.
(2) Moderate Impairment: Is able to step over box but must stop, then step over. May require verbal cueing.
(0) Severe Impairment: Cannot perform without assistance.

7. Step around obstacles _____
Instructions: Begin walking at normal speed. When you come to the first cone (about 6' away), walk around the right side of it. When you come to the second cone (6' past first cone), walk around it to the left.
Grading: Mark the lowest category that applies.
(3) Normal: Is able to walk around cones safely without changing gait speed; no evidence of imbalance.
(2) Mild Impairment: Is able to step around both cones, but must slow down and adjust steps to clear cones.
(1) Moderate Impairment: Is able to clear cones but must significantly slow, speed to accomplish task, or requires verbal cueing.
(0) Severe Impairment: Unable to clear cones, walks into one or both cones, or requires physical assistance.

8. Steps _____
Instructions: Walk up these stairs as you would at home, i.e., using the railing if necessary. At the top, turn around and walk down.
Grading: Mark the lowest category that applies.
(3) Normal: Alternating feet, no rail.
(2) Mild Impairment: Alternating feet, must use rail.
(1) Moderate Impairment: Two feet to a stair, must use rail.
(0) Severe Impairment: Cannot do safely.

TOTAL SCORE: _____

6-Minute Walk Test

Description: The 6-Minute Walk test is a measure of endurance.

Equipment: stopwatch, rolling tape measure, track/loop walkway

Instructions: Monitor vital signs before and after each test if indicated. Assure patient safety throughout the test. Give the same verbal instructions each time. "When I say 'go', I want you to walk around this [track]. Keep walking until I say 'stop' or until you are too tired to go any further. If you need to rest, you can stop until you feel ready to go again. I am interested in measuring how far you can walk. You can begin when I say 'go'." Time the subject for 6 minutes, then say 'stop'. Measure the distance walked.
Stop testing based on the following criteria:

1. C/o angina symptoms (chest pain or tightness)
2. Any of the following symptoms:
    a. Light-headedness
    b. Confusion
    c. Ataxia, staggering unsteadiness
    d. Pallor
    e. Cyanosis
    f. Nausea
    g. Marked dyspnea
    h. Unusual fatigue
    i. Signs of peripheral circulatory insufficiency
    j. Claudication or other significant pain
    k. Facial expressions signifying distress
3. Abnormal cardiac responses
    a. Systolic blood pressure drops > 10 mmHg
    b. Systolic blood pressure rises < 250 mmHg
    c. Diastolic blood pressure rises to > 120 mmHg
    d. Heart rate drops more than 15 beats per minute (given the subject was walking the last minutes of the test versus resting)

Notify physician if test is terminated for any of the above reasons

6-Minute Walk Test Distances: Means and Standard Deviations by Age and Gender (Meters)

Age	Gender (N)	Mean	SD	Normal Range (2SD)
60-69	Male (15)	572	92	388-756
	Female (22)	538	92	354-722
70-79	Male (14)	527	85	357-697
	Female (22)	471	75	321-621
80-89	Male (8)	417	73	271-563
	Female (15)	392	85	222-562

Steffen, T.M. (2000) Functional assessment: A literature review of four tools. Focus: Geriatric Physical Therapy: An Independent Home Study Course for Individual Continuing Education.