

## Modified Fall Assessment Tool (Farmer, 2003)

Please circle all factor scores that apply to the patient and/or environment

	Initial Score	Reassessed score
<b>Patient factors</b>		
History of falls	15	15
Confusion	5	5
Age (over 65)	5	5
Impaired judgment	5	5
Sensory deficit	5	5
Unable to ambulate independently	5	5
Decreased level of cooperation	5	5
Increased anxiety/emotional lability	5	5
Incontinence/urgency	5	5
Cardiovascular/respiratory disease affecting perfusion and oxygenation	5	5
Medication affecting blood pressure or level of consciousness	5	5
Postural hypotension with dizziness	5	5
<b>Environmental Factors</b>		
First week on unit	5	5
Attached equipment (e.g., IV pole, chest tubes, appliances, O2 tubing etc.)	5	5
<b>TOTAL POINTS</b>		

\* **≥20 points indicates increased fall risk**

References:

Jakovljevic M. Predictive validity of a modified fall assessment tool in nursing homes: Experience from slovenia. *Nursing & health sciences*. 12/2009;11(4):430-435. doi: 10.1111/j.1442-2018.2009.00471.x.

## 5 Times Sit to Stand

Taken directly from: Shirley Ryan AbilityLab. (n.d.). *Five Times Sit to Stand Test*. [online] Available at: <https://www.sralab.org/rehabilitation-measures/five-times-sit-stand-test>.

### Logistics:

- One trial is administered
- A patient is instructed to sit with arms folded across their chest and with their back against the chair. A patient with hemiplegia can have the impaired arm at his/her side or in a sling.
- Instruct the patient: "I want you to stand up and sit down five times in a row, as quickly as you can, when I say 'Go'. Be sure to stand up fully and try not to let your back touch the chair back between each repetition. Do not use the back of your legs against the chair."
- Time starts when the tester says "Go."
- Time stops when the patient's body touches the chair following the fifth repetition.
- If individuals are unable to complete the first sit to stand independently, without use of arms, the test is terminated.

### Scoring:

- Document the time in seconds (to the nearest decimal) required to complete the test
- If the patient cannot perform five stands to complete the test without use of arms, a score of 0 seconds should be documented. When possible within the medical record it is also recommended to note the reason, such as "unable to perform five repetitions." The tester should document any compensatory movements that the patient uses.

### Additional Recommendations:

- To track change, it is recommended that this measure is administered a minimum of two times (admission and discharge) under the same testing conditions.
- The patient can perform a practice session to ensure familiarization with the test.

\* **≥ 12 seconds indicates high falls risk**

## 5 Times Sit to Stand Testing Form

Name: \_\_\_\_\_

Date: \_\_\_\_\_

Time: \_\_\_\_\_

Date: \_\_\_\_\_

Time: \_\_\_\_\_

Date: \_\_\_\_\_

Time: \_\_\_\_\_

### References:

1. Whitney SL, Wrisley DM, Marchetti GF, Gee MA, Redfern MS, Furman JM. Clinical measurement of sit-to-stand performance in people with balance disorders: validity of data for the Five-Times- Sit-to-Stand Test. *Phys Ther.* 2005;85(10):1034-1045.
2. Duncan RP, Leddy AL, Earhart GM. Five times sit-to-stand test performance in Parkinson's disease. *Arch Phys Med Rehabil.* 2011;92:1431-6.
3. Kwong PWH, Ng SSM, Chung RCK, Ng CYF. Foot placement and arm position affect the Five Times Sit-to-Stand Test time of individuals with chronic stroke. *BioMed Research International.* 2014; 636530.
4. Bohannon, Richard W., et al. Sit-to-stand test: performance and determinants across the age- span." *Isokinet Exerc Sci.* 2010;18:4235-240.
5. Møller, Andreas Buch, et al. Validity and variability of the 5-repetition sit-to-stand test in patients with multiple sclerosis. *Disabil Rehabil.* 2012;34(26):2251-2258.
6. Mong Y, Teo TW, Ng SS. 5-repetition sit-to-stand test in subjects with chronic stroke: reliability and validity. *Arch Phys Med Rehabil.* 2010;91(3): 407-413.

# Timed Up and Go Instructions

## General Information (derived from Podsiadlo and Richardson, 1991):

- The patient should sit on a standard armchair, placing his/her back against the chair and resting his/her arms on the chair's arms. Any assistive device used for walking should be nearby.
- Regular footwear and customary walking aids should be used.
- The patient should walk to a line that is 3 meters (9.8 feet) away, turn around at the line, walk back to the chair, and sit down.
- The test ends when the patient's buttocks touch the seat.
- Patients should be instructed to use a comfortable and safe walking speed.
- A stopwatch should be used to time the test (in seconds).

## Set-up:

- Measure and mark a 3 meter (9.8 feet) walkway
- Place a standard height chair (seat height 46cm, arm height 67cm) at the beginning of the walkway

## Patient Instructions (derived from Podsiadlo and Richardson, 1991):

- Instruct the patient to sit on the chair and place his/her back against the chair and rest his/her arms on the chair's arms.
- The upper extremities should not be on the assistive device (if used for walking), but it should be nearby.
- Demonstrate the test to the patient.
- When the patient is ready, say "Go"
- The stopwatch should start when you say go, and should be stopped when the patient's buttocks touch the seat.

\* **A time  $\geq$  13.5 seconds indicates increased falls risk.**

# Timed Up and Go Testing Form

Name: \_\_\_\_\_

Assistive Device and/or Bracing Used: \_\_\_\_\_

Date: \_\_\_\_\_

TUG time: \_\_\_\_\_

Date: \_\_\_\_\_

TUG time: \_\_\_\_\_

Date: \_\_\_\_\_

TUG time: \_\_\_\_\_

Date: \_\_\_\_\_

TUG time: \_\_\_\_\_

Reference:

Podsiadlo, D. and Richardson, S. (1991). "The timed "Up & Go": a test of basic functional mobility for frail elderly persons." J Am Geriatr Soc 39(2): 142-148.

## Berg Balance Scale

Taken directly from: Shirley Ryan AbilityLab. (n.d.). *Berg Balance Scale*. [online] Available at: <https://www.sralab.org/rehabilitation-measures/berg-balance-scale>.

### 1. **Sitting to Standing**

Instruction: *Please stand up. Try not to use your hands for support.*

- (0) Needs moderate to maximal assist to stand
- (1) Needs minimal assist to stand or to stabilize
- (2) Able to stand using hands after several tries
- (3) Able to stand independently using hands
- (4) Able to stand, no hands and stabilize independently

### 2. **Standing Unsupported**

Instruction: *Stand for two minutes without holding.*

- (0) Unable to stand 30 seconds unassisted
- (1) Needs several tries to stand 30 seconds unsupported
- (2) Able to stand 30 seconds unsupported
- (3) Able to stand 2 minutes with supervision
- (4) Able to stand safely 2 minutes

### 3. **Sitting unsupported feet on floor**

Instruction: *Sit with arms folded for two minutes*

- (0) Unable to sit without support 10 seconds
- (1) Able to sit 10 seconds
- (2) Able to sit 30 seconds
- (3) Able to sit 2 minutes under supervision
- (4) Able to sit safely and securely 2 minutes

### 4. **Standing to sitting**

Instructions: *Please sit down*

- (0) Needs assistance to sit
- (1) Sits independently but has uncontrolled descent
- (2) Uses back of legs against chair to control descent
- (3) Controls descent by using hands
- (4) Sits safely with minimal use of hands

### 5. **Transfers**

Instructions: *Please move from chair or bed and back again. One way toward a seat with armrests and one way toward a seat without arm rests.*

- (0) Needs two people to assist or supervise to be safe
- (1) Needs one person to assist
- (2) Able to transfer with verbal cueing and/or supervision
- (3) Able to transfer safely with definite need of hands
- (4) Able to transfer safely with only minor use of hands

### 6. **Standing unsupported with eyes closed**

Instruction: *close your eyes and stand still for 10 seconds.*

- (0) Needs help to keep from falling
- (1) Unable to keep eyes closed 3 seconds but stays steady
- (2) Able to stand 3 seconds
- (3) Able to stand 10 seconds with supervision
- (4) Able to stand 10 seconds safely

### 7. **Standing unsupported with feet together**

Instruction: *Place your feet together and stand without holding*

- (0) Needs help to attain position and unable to hold for 15 seconds
- (1) Needs help to attain position but able to stand 15 seconds feet together
- (2) Able to place feet together independently but unable to hold for 30 seconds
- (3) Able to place feet together independently and stand for 1 minute with supervision
- (4) Able to place feet together independently and stand 1 minute safely

### 8. **Reaching forward with outstretched arms (in standing)**

Instruction: *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.)*

- (0) Needs help to keep from falling
- (1) Reaches forward but needs supervision
- (2) Can reach forward >2 inches safely
- (3) Can reach forward >5 inches safely
- (4) Can reach forward confidently >10 inches

**9. Picks up object from floor**

Instruction: *Pick up the shoe/slipper which is placed in front of your feet.*

- (0) Unable to try/needs assist to keep from falling
- (1) Unable to pick up and needs supervision while trying
- (2) Unable to pick up but reaches 1-2 inches from slipper and keeps balance independently
- (3) Able to pick up slipper but needs supervision
- (4) Able to pick up slipper safely and easily

**10. Turning to look behind/over left and right shoulders**

Instruction: *Turn to look behind you over/toward your left shoulder. Repeat to the right.*

- (0) Needs assist to keep from falling
- (1) Needs supervision when turning
- (2) Turns sideways only but maintains balance
- (3) Looks behind one side only; other side shows less weight shift
- (4) Looks behind from both sides and weight shifts well

**11. Turn 360 degrees**

Instructions: *Turn completely around in a full circle. Pause. Then turn a full circle in the other direction.*

- (0) Needs assistance while turning
- (1) Needs close supervision or verbal cueing
- (2) Able to turn 360 safely but slowly
- (3) Able to turn 360 safely one side only in <4 seconds
- (4) Able to turn 360 safely in <4 seconds each side

**12. Count number of times step touch measured stool**

Instruction: *Place each foot alternately on the stool. Continue until each foot has touched the stool four times.*

- (0) Needs assistance to keep from falling/unable to try
- (1) Able to complete >2 steps needs minimal assist
- (2) Able to complete 4 steps without aid with supervision
- (3) Able to stand independently and complete 8 steps in >20 seconds
- (4) Able to stand independently and safely and complete 8 steps in 20 seconds

**13. Standing unsupported, one foot in front**

Instruction: *(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.*

- (0) Loses balance while stepping or standing
- (1) Needs help to step but can hold 15 seconds
- (2) Able to take small step independently and hold 30 seconds
- (3) Able to place foot ahead of other independently and hold 30 seconds
- (4) Able to place foot tandem independently and hold 30 seconds

**14. Standing on one leg**

Instruction: *Stand on one leg as long as you can without holding.*

- (0) Unable to try or needs assist to prevent fall
- (1) Tries to lift leg; unable to hold 3 seconds but remains standing independently
- (2) Able to lift leg independently and hold = or > 3 seconds
- (3) Able to lift leg independently and hold 5-10 seconds
- (4) Able to lift leg independently and hold >10 seconds

TOTAL SCORE: \_\_\_\_\_/56

\* **A score of <45 indicates falls risk**