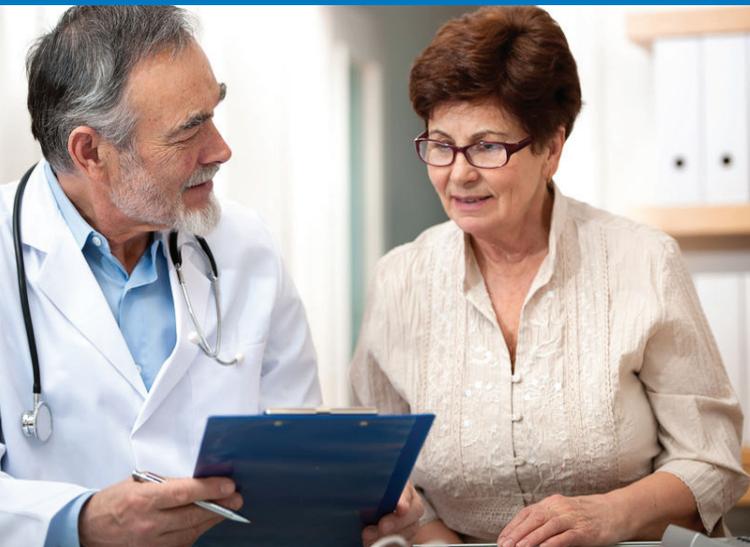


All older adults over the age of 65 should be screened at least annually to identify those at risk for falls.



#### Key Facts About Falls:

- Falls usually happen due to a factor or combination of factors that can be prevented
- The more risk factors a person has, the greater their chance of falling
- Many older patients who have fallen do not talk about it

#### Fall Screening Questions:

- Have you fallen in the past year?
- Do you feel unsteady when standing or walking?
- Do you worry about falling?

#### Self-Screening Checklist:

- Older patients are encouraged to assess their risk of fall by answering the statements in the **Staying Independent Self-Screening Checklist**.
- If the patient scores 4 points or more or if they answered YES to any of the fall screening questions above, proceed with a gait, strength and balance evaluation

#### Did you know?

- Approximately 8 hospital admissions occur each day in New Brunswick due to fall-related injuries in older adults.
- Women are two times more likely to be admitted to hospital due to fall.
- The average length of stay in hospital due to a fall is 23 days.

#### For more information visit:



[www.NBTrauma.ca](http://www.NBTrauma.ca)



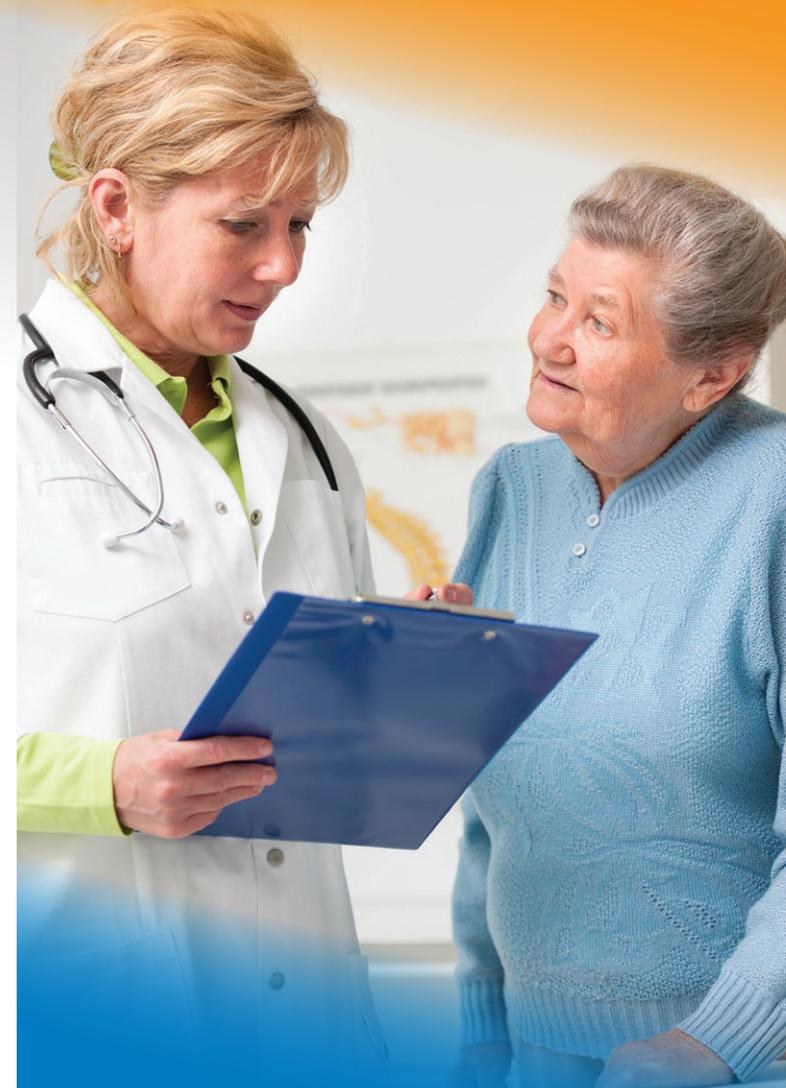
[www.FindingBalanceNB.ca](http://www.FindingBalanceNB.ca)



[www.nbms.nb.ca](http://www.nbms.nb.ca)

# MOBILITY ASSESSMENT

## Evaluating Gait, Strength and Balance in Older Adults



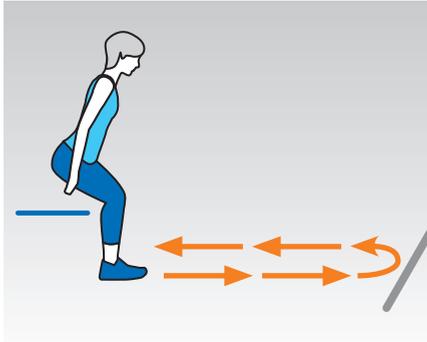
## TIMED UP AND GO (TUG)

### Purpose:

To assess mobility

### Equipment:

- A standard chair with a straight back without arm rests
- A measuring tape
- A stopwatch



### Directions:

Patients should wear their regular footwear and can use a walking aid, if needed. Begin by having the patient sit back in a standard chair and identify with masking tape or another marker, a line on the floor 3 meters or 10 feet away.

On the word “Go,” begin timing and stop timing after the patient sits back down.

**Note:** Always stay by the patient for safety

### Instruct the patient to:

1. Stand up from the chair when hearing the word “Go”.
2. Walk to the line on the floor at a normal pace.
3. Turn around in order to face the chair.
4. Walk back to the chair at a normal pace.
5. Sit down again.

### Observations:

Observe the patient’s postural stability, gait, stride length, and sway.

### Note all that apply:

- Slow tentative pace
- Loss of balance
- Short strides
- Little or no arm swing
- Steadying self on walls
- Shuffling feet
- Turning “en bloc”
- Not using assistive device properly

An older adult who takes  $\geq 12$  seconds to complete the Timed Up And Go is at increased risk for falling.

## 4-STAGE BALANCE TEST

### Purpose:

To assess static balance

### Equipment:

- A standard chair with a straight back without arm rests
- A stopwatch

### Directions:

Describe and demonstrate each of the four progressively more challenging standing positions to the patient.

1. Parallel Stance
2. Semi-Tandem Stance
3. Tandem Stance
4. One-Legged Stance

Patient should not use an assistive device (cane or walker). However, they must keep their eyes open during the test. Patients may hold their arms out, or move their body to help keep their balance, but without moving their feet.

When the patient is steady, instruct them to let go of the chair and time how long they can maintain each position. On the word “Go,” begin timing. After 10 seconds, say “Stop”. If the patient can hold a position for 10 seconds without moving their feet or needing support, go to the next position. If not, stop the test.

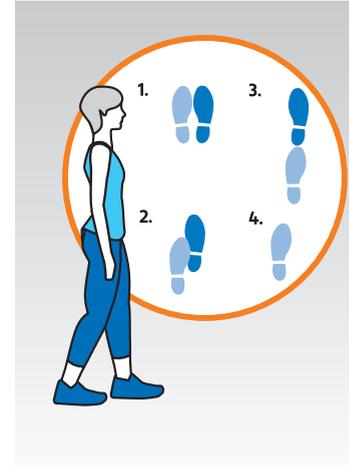
**Note:** Stand next to the patient to help them assume the correct position and to remain ready to assist, in case they lose their balance.

### Instruct the patient to:

1. Place their feet in the correct way for each of the four standing positions
2. Hold onto the chair until they feel balanced
3. Let go of the chair when they hear the word “Go”
4. Try to stand in the same position without holding on or taking a step until hearing the word “Stop”

### Observations:

Observe the patient’s postural stability and the amount of sway. An older adult who cannot hold the tandem stance for at least 10 seconds is at increased risk of falling.



## 30-SECOND CHAIR STAND TEST

### Purpose:

To assess leg strength and endurance

### Equipment:

- A standard chair with a straight back without arm rests
- A stopwatch

### Directions:

It is recommended to place the chair against a wall to prevent it from moving during the test. Begin by having the patient sit back in a chair without arm rests.

On the word “Go,” begin timing. Count and record the number of times the patient comes to a full standing position in 30 seconds. Do not continue if you feel the patient may fall during the test.

**Note:** Always stay by the patient for safety

### Instruct the patient to:

1. Sit in the middle of the chair.
2. Place their hands on the opposite shoulder crossed, at the wrists.
3. Keep their feet flat on the floor.
4. Keep their back straight, and to keep their arms against their chest.
5. Rise to a full standing position, and then sit back down again once they hear the word “Go”.
6. Repeat this for 30 seconds

### Observations:

Observe the patient’s ability to get up from a seated position. If the patient is over halfway to a standing position when 30 seconds have elapsed, count it as a stand. If the patient must use his/her arms to stand, stop the test. Record the number “0” for their score. An older adult with a below average score for their age and sex indicates an increased risk for falls.

SCORING TABLE		
AGE	MEN	WOMEN
60-64	< 14	< 12
65-69	< 12	< 11
70-74	< 12	< 10
75-79	< 11	< 10
80-84	< 10	< 9
85-89	< 8	< 8
90-94	< 7	< 4

