Timed Up and Go (TUG) Test

Name:_____ MR: _____ Date:_____

1. Equipment: arm chair, tape measure, tape, stop watch.
2. Begin the test with the subject sitting correctly (hips all of the way to the back of the seat) in a chair with arm rests. The chair should be stable and positioned such that it will not move when the subject moves from sit to stand. The subject is allowed to use the arm rests during the sit – stand and stand – sit movements.
3. Place a piece of tape or other marker on the floor 3 meters away from the chair so that it is easily seen by the subject.
4. Instructions: "On the word GO you will stand up, walk to the line on the floor, turn around and walk back to the chair and sit down. Walk at your regular pace.
5. Start timing on the word "GO" and stop timing when the subject is seated again correctly in the chair with their back resting on the back of the chair.
6. The subject wears their regular footwear, may use any gait aid that they normally use during ambulation, but may not be assisted by another person. There is no time limit. They may stop and rest (but not sit down) if they need to.
7. Normal healthy elderly usually complete the task in ten seconds or less. Very frail or weak elderly with poor mobility may take 2 minutes or more.
8. The subject should be given a practice trial that is not timed before testing.
9. Results correlate with gait speed, balance, functional level, the ability to go out, and can follow change over time.

Normative Reference Values by Age

Age Group	Time in Seconds (95% Confidence Interval)	
60 – 69 years	8.1	(7.1 – 9.0)
70 – 79 years	9.2	(8.2 – 10.2)
80 – 99 years	11.3	(10.0 – 12.7)

Cut-off Values Predictive of Falls by

Group	Time in Seconds
Community Dwelling Frail Older Adults	> 14 associated with high fall risk
Post-op hip fracture patients at time of discharge[3]	> 24 predictive of falls within 6 months after hip fracture
Frail older adults	≥ 30 predictive of requiring assistive device for ambulation and being dependent in ADLs

Date	Time	Date	Time	Date	Time	Date	Time

References

1. Bohannon RW. Reference values for the Timed Up and Go Test: A Descriptive Meta-Analysis. Journal of Geriatric Physical Therapy, 2006;29(2):64-8.
2. Shumway-Cook A, Brauer S, Woollacott M. Predicting the probability for falls in community-dwelling older adults using the timed up & go test. Phys Ther. 2000;80:896-903.
3. Kristensen MT, Foss NB, Kehlet H. Timed "Up and Go" Test as a predictor of falls within 6 months after hip fracture surgery. Phys Ther. 2007.87(1):24-30.

Additional References

Bischoff HA, Stahelin HB, et al. Identifying a cut-off point for normal mobility: A comparison study of the timed "up and go" test in community-dwelling and institutionalized elderly women. Age and Ageing. 2003;32:315-320.

Boulgarides LK, McGinty SM, et al. Use of clinical and impairment-based tests to predict falls by community-dwelling older adults. Phys Ther. 2003;83:328-339.

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

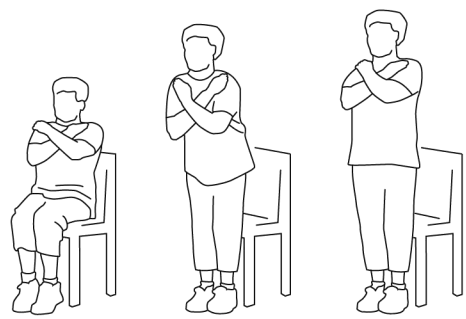
Patient name:	Date:	Time:	AM/PM
NHI:	Test carried out by:		

The 30-Second Chair Stand Test

Overview: The 30 Second Chair Stand Test, in conjunction with other measures such as the 4-Stage Balance Test, Timed Up and Go (TUG) Test and an assessment of postural hypotension can help to indicate if a patient is at risk of falling.

Purpose: To test leg strength and endurance:

Equipment:
- A chair with a straight back, without arm rests, placed against a wall to prevent it moving
- A stopwatch/timer



Instructions to the patient:

1. Sit in the middle of the chair.
2. Place each hand on the opposite shoulder crossed at the wrists.
3. Place your feet flat on the floor.
4. Keep your back straight and keep your arms against your chest.
5. On "**Go**", rise to a full standing position and then sit back down again.
6. Repeat this for 30 seconds.

On "**Go**" begin timing.

Do not continue if you feel the patient may fall during the test.

Count the number of times the patient comes to a full standing position in 30 seconds and record it in the box below.

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 or her arms to stand then stop the test and record "0" for the number below.

Number:	(See over page for what this means)

A below average number of stands for the patient's age group indicates a high risk of falls.

Notes:

This resource was developed by bpac[nz] for the Health Quality & Safety Commission based on the STEADI falls campaign by the US Centres for Diseases Control and Prevention (CDC).

Chair stand – Number of stands by age group[1]

MEN			
Age group (years)	**Below Average**	**Average**	**Above Average**
60 – 64	< 14	14 – 19	>19
65 – 69	< 12	12 – 18	>18
70 – 74	< 12	12 – 17	>17
75 – 79	< 11	11 – 17	>17
80 – 84	< 10	10 – 15	>15
85 – 89	< 8	8 – 14	>14
90 – 94	< 7	7 – 12	>12

WOMEN			
Age group (years)	**Below Average**	**Average**	**Above Average**
60 – 64	< 12	12 – 17	>17
65 – 69	< 11	11 – 16	>16
70 – 74	< 10	10 – 15	>15
75 – 79	< 10	10 – 15	>15
80 – 84	< 9	9 – 14	>14
85 – 89	< 8	8 – 13	>13
90 – 94	< 4	4 – 11	>11

1 Rikli R, Jones C, Functional fitness normative scores for community-residing older adults, ages 60-94. J Aging Phys Activity 1999;7(2):162-81.

This resource was developed by bpac^nz for the Health Quality & Safety Commission based on the STEADI falls campaign by the US Centres for Diseases Control and Prevention (CDC).

Patient: Date: Time: AM/PM

The 4-Stage Balance Test

Purpose: To assess static balance

Equipment: A stopwatch

Directions: There are four progressively more challenging positions. Patients should not use an assistive device (cane or walker) and keep their eyes open.

Describe and demonstrate each position. Stand next to the patient, hold his/her arm and help them assume the correct foot position.

When the patient is steady, let go, but remain ready to catch the patient if he/she should lose their balance.

If the patient can hold a position for 10 seconds without moving his/her feet or needing support, go on to the next position. If not, stop the test.

Instructions to the patient: I'm going to show you four positions.

Try to stand in each position for 10 seconds. You can hold your arms out or move your body to help keep your balance but don't move your feet. Hold this position until I tell you to stop.

For each stage, say "**Ready, begin**" and begin timing.

After 10 seconds, say "**Stop.**"

See next page for detailed patient instructions and illustrations of the four positions.

For relevant articles, go to: **www.cdc.gov/injury/STEADI**

Centers for Disease Control and Prevention
National Center for Injury Prevention and Control

STEADI Stopping Elderly Accidents, Deaths & Injuries

Instructions to the patient:

1. Stand with your feet side by side. **Time: _____ seconds**

2. Place the instep of one foot so it is touching the big toe of the other foot. **Time: _____ seconds**

3. Place one foot in front of the other, heel touching toe. **Time: _____ seconds**

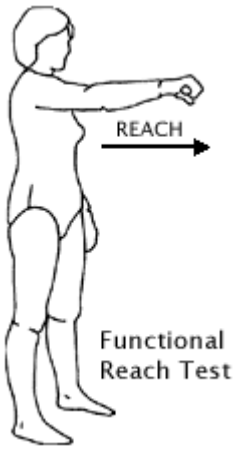
4. Stand on one foot. **Time: _____ seconds**

An older adult who cannot hold the tandem stance for at least 10 seconds is at increased risk of falling.

Notes:

Functional Reach Test

The Functional Reach Test was first developed by Pamela Duncan and colleagues in 1990. It is a quick and simple, single-task dynamic test that defines functional reach as "the maximal distance one can reach forward beyond arm's length, while maintaining a fixed base of support in the standing position" (Duncan et al., 1990).



It is a dynamic rather than a static test and measures a person's "margin of stability" as well as ability to maintain balance during a functional task. The test has been shown by Duncan to be predictive of falls in older adults (Duncan et al., 1990).

Functional reach is tested by placing a yardstick or tape measure on the wall, parallel to the floor, at the height of the acromion of the subject's dominant arm. The subject is asked to stand with the feet a comfortable distance apart, make a fist, and forward flex the dominant arm to approximately 90 degrees. The subject is asked to reach forward as far as possible without taking a step or touching the wall. The distance between the start and end point is then measured using the head of the metacarpal of the third finger as the reference point (Duncan et al., 1990).

FUNCTIONAL REACH NORMS		
Age	**Men**	**Women**
Source: Duncan et al., 1990.		
20-40	16.73 inches	14.64 inches
41-69	14.98 inches	13.81 inches
70-87	13.16 inches	10.47 inches

Appendix.

Functional Gait Assessment[a]

Requirements: A marked 6-m (20-ft) walkway that is marked with a 30.48-cm (12-in) width.

_____1. GAIT LEVEL SURFACE

Instructions: *Walk at your normal speed from here to the next mark (6 m [20 ft]).*

Grading: Mark the highest category that applies.

(3) Normal—Walks 6 m (20 ft) in less than 5.5 seconds, no assistive devices, good speed, no evidence for imbalance, normal gait pattern, deviates no more than 15.24 cm (6 in) outside of the 30.48-cm (12-in) walkway width.

(2) Mild impairment—Walks 6 m (20 ft) in less than 7 seconds but greater than 5.5 seconds, uses assistive device, slower speed, mild gait deviations, or deviates 15.24 –25.4 cm (6–10 in) outside of the 30.48-cm (12-in) walkway width.

(1) Moderate impairment—Walks 6 m (20 ft), slow speed, abnormal gait pattern, evidence for imbalance, or deviates 25.4 – 38.1 cm (10 –15 in) outside of the 30.48-cm (12-in) walkway width. Requires more than 7 seconds to ambulate 6 m (20 ft).

(0) Severe impairment—Cannot walk 6 m (20 ft) without assistance, severe gait deviations or imbalance, deviates greater than 38.1 cm (15 in) outside of the 30.48-cm (12-in) walkway width or reaches and touches the wall.

_____2. CHANGE IN GAIT SPEED

Instructions: *Begin walking at your normal pace (for 1.5 m [5 ft]). When I tell you "go," walk as fast as you can (for 1.5 m [5 ft]). When I tell you "slow," walk as slowly as you can (for 1.5 m [5 ft]).*

Grading: Mark the highest 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. Deviates no more than 15.24 cm (6 in) outside of the 30.48-cm (12-in) walkway width.

(2) Mild impairment—Is able to change speed but demonstrates mild gait deviations, deviates 15.24 –25.4 cm (6–10 in) outside of the 30.48-cm (12-in) walkway width, or no 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, deviates 25.4 –38.1 cm (10 –15 in) outside the 30.48-cm (12-in) walkway width, or changes speed but loses balance but is able to recover and continue walking.

(0) Severe impairment—Cannot change speeds, deviates greater than 38.1 cm (15 in) outside 30.48-cm (12-in) walkway width, or loses balance and has to reach for wall or be caught.

_____3. GAIT WITH HORIZONTAL HEAD TURNS

Instructions: *Walk from here to the next mark 6 m (20 ft) away. Begin walking at your normal pace. Keep walking straight; after 3 steps, turn your head to the right and keep walking straight while looking to the right. After 3 more steps, turn your head to the left and keep walking straight while looking left. Continue alternating looking right and left every 3 steps until you have completed 2 repetitions in each direction.*

Grading: Mark the highest category that applies.

(3) Normal—Performs head turns smoothly with no change in gait. Deviates no more than 15.24 cm (6 in) outside 30.48-cm (12-in) walkway width.

(2) Mild impairment—Performs head turns smoothly with slight change in gait velocity (eg, minor disruption to smooth gait path), deviates 15.24 –25.4 cm (6–10 in) outside 30.48-cm (12-in) walkway width, or uses an assistive device.

(1) Moderate impairment—Performs head turns with moderate change in gait velocity, slows down, deviates 25.4 –38.1 cm (10 –15 in) outside 30.48-cm (12-in) walkway width but recovers, can continue to walk.

(0) Severe impairment—Performs task with severe disruption of gait (eg, staggers 38.1 cm [15 in] outside 30.48-cm (12-in) walkway width, loses balance, stops, or reaches for wall).

_____4. GAIT WITH VERTICAL HEAD TURNS

Instructions: *Walk from here to the next mark (6 m [20 ft]). Begin walking at your normal pace. Keep walking straight; after 3 steps, tip your head up and keep walking straight while looking up. After 3 more steps, tip your head down, keep walking straight while looking down. Continue alternating looking up and down every 3 steps until you have completed 2 repetitions in each direction.*

Grading: Mark the highest category that applies.

(3) Normal—Performs head turns with no change in gait. Deviates no more than 15.24 cm (6 in) outside 30.48-cm (12-in) walkway width.

(2) Mild impairment—Performs task with slight change in gait velocity (eg, minor disruption to smooth gait path), deviates 15.24 –25.4 cm (6–10 in) outside 30.48-cm (12-in) walkway width or uses assistive device.

(1) Moderate impairment—Performs task with moderate change in gait velocity, slows down, deviates 25.4 –38.1 cm (10 –15 in) outside 30.48-cm (12-in) walkway width but recovers, can continue to walk.

(0) Severe impairment—Performs task with severe disruption of gait (eg, staggers 38.1 cm [15 in] outside 30.48-cm (12-in) walkway width, loses balance, stops, reaches for wall).

_____5. GAIT AND PIVOT TURN

Instructions: *Begin with 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 highest 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, or pivot turns safely within 3 seconds and stops with mild imbalance, requires small steps to catch balance.

(1) Moderate impairment—Turns slowly, requires verbal cueing, or 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 shoe box, step over it, not around it, and keep walking.*

Grading: Mark the highest category that applies.

(3) Normal—Is able to step over 2 stacked shoe boxes taped together (22.86 cm [9 in] total height) without changing gait speed; no evidence of imbalance.

(2) Mild impairment—Is able to step over one shoe box (11.43 cm [4.5 in] total height) without changing gait speed; no evidence of imbalance.

(1) Moderate impairment—Is able to step over one shoe box (11.43 cm [4.5 in] total height) but must slow down and adjust steps to clear box safely. May require verbal cueing.

(0) Severe impairment—Cannot perform without assistance.

(Continued)

Appendix.
Continued

_____7. GAIT WITH NARROW BASE OF SUPPORT

Instructions: *Walk on the floor with arms folded across the chest, feet aligned heel to toe in tandem for a distance of 3.6 m [12 ft]. The number of steps taken in a straight line are counted for a maximum of 10 steps.*
Grading: Mark the highest category that applies.

(3) Normal—Is able to ambulate for 10 steps heel to toe with no staggering.
(2) Mild impairment—Ambulates 7–9 steps.
(1) Moderate impairment—Ambulates 4–7 steps.
(0) Severe impairment—Ambulates less than 4 steps heel to toe or cannot perform without assistance.

_____8. GAIT WITH EYES CLOSED

Instructions: *Walk at your normal speed from here to the next mark (6 m [20 ft]) with your eyes closed.*
Grading: Mark the highest category that applies.

(3) Normal—Walks 6 m (20 ft), no assistive devices, good speed, no evidence of imbalance, normal gait pattern, deviates no more than 15.24 cm (6 in) outside 30.48-cm (12-in) walkway width. Ambulates 6 m (20 ft) in less than 7 seconds.
(2) Mild impairment—Walks 6 m (20 ft), uses assistive device, slower speed, mild gait deviations, deviates 15.24 –25.4 cm (6–10 in) outside 30.48-cm (12-in) walkway width. Ambulates 6 m (20 ft) in less than 9 seconds but greater than 7 seconds.
(1) Moderate impairment—Walks 6 m (20 ft), slow speed, abnormal gait pattern, evidence for imbalance, deviates 25.4 –38.1 cm (10–15 in) outside 30.48-cm (12-in) walkway width. Requires more than 9 seconds to ambulate 6 m (20 ft).
(0) Severe impairment—Cannot walk 6 m (20 ft) without assistance, severe gait deviations or imbalance, deviates greater than 38.1 cm (15 in) outside 30.48-cm (12-in) walkway width or will not attempt task.

_____9. AMBULATING BACKWARDS

Instructions: *Walk backwards until I tell you to stop.*
Grading: Mark the highest category that applies.

(3) Normal—Walks 6 m (20 ft), no assistive devices, good speed, no evidence for imbalance, normal gait pattern, deviates no more than 15.24 cm (6 in) outside 30.48-cm (12-in) walkway width.
(2) Mild impairment—Walks 6 m (20 ft), uses assistive device, slower speed, mild gait deviations, deviates 15.24 –25.4 cm (6–10 in) outside 30.48-cm (12-in) walkway width.
(1) Moderate impairment—Walks 6 m (20 ft), slow speed, abnormal gait pattern, evidence for imbalance, deviates 25.4 –38.1 cm (10–15 in) outside 30.48-cm (12-in) walkway width.
(0) Severe impairment—Cannot walk 6 m (20 ft) without assistance, severe gait deviations or imbalance, deviates greater than 38.1 cm (15 in) outside 30.48-cm (12-in) walkway width or will not attempt task.

_____10. STEPS

Instructions: *Walk up these stairs as you would at home (ie, using the rail if necessary). At the top turn around and walk down.*
Grading: Mark the highest 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: _____MAXIMUM SCORE 30

[a] Adapted from Dynamic Gait Index.

Reference: Wrisley DM, Marchetti GF, Kuharsky DK, Whitney SL. Reliability, internal consistency, and validity of data obtained with the functional gait assessment. *Phys Ther*. 2004;84(10):906-918.

Normative Values:

Healthy Adults:

(Walker et al, 2007; *n* = 200, aged 40 to 89. Unimpaired Adults)

Age	*n*	Min score	Max score	Mean	SD	95% CI
40-49	27	24	30	28.9	1.5	28.3-29.5
50-59	33	25	30	28.4	1.6	27.9-29.0
60-69	63	20	30	27.1	2.3	26.5-27.7
70-79	44	16	30	24.9	3.6	23.9-26.0
80-89	33	10	28	20.8	4.7	19.2-22.6
Total	200	10	30	26.1	4.0	25.5-26.6

- Mean total FGA scores demonstrate an overall decrease with increased age
- Increased variability in scores noted with each decade increase in age (increased SD's)

Information taken from Rehab Measures

Morse Fall Scale

Fall Risk is based upon Fall Risk Factors and it is more than a Total Score. Determine Fall Risk Factors and Target Interventions to Reduce Risks. Complete on admission, at change of condition, transfer to a new unit, and after a fall.

Variables		Score	Admission Date	Review Date	Review Date
History of Falling	No Yes	0 25			
Secondary Diagnosis	No Yes	0 15			
Ambulatory Aid	None/bedrest/nurse assist	0			
	Crutches/cane/walker	15			
	Furniture	30			
IV or IV access	No Yes	0 20			
Gait	Normal/bedrest/wheelchair	0			
	Weak	10			
	Impaired	20			
Mental Status	Knows own limits	0			
	Overestimates or forgets limits	15			
		Total			
		Signature & Status			

To obtain the Morse Fall Score add the score from each category.

Morse Fall Score	
High Risk	45 and higher
Moderate Risk	25-44
Low Risk	0-24

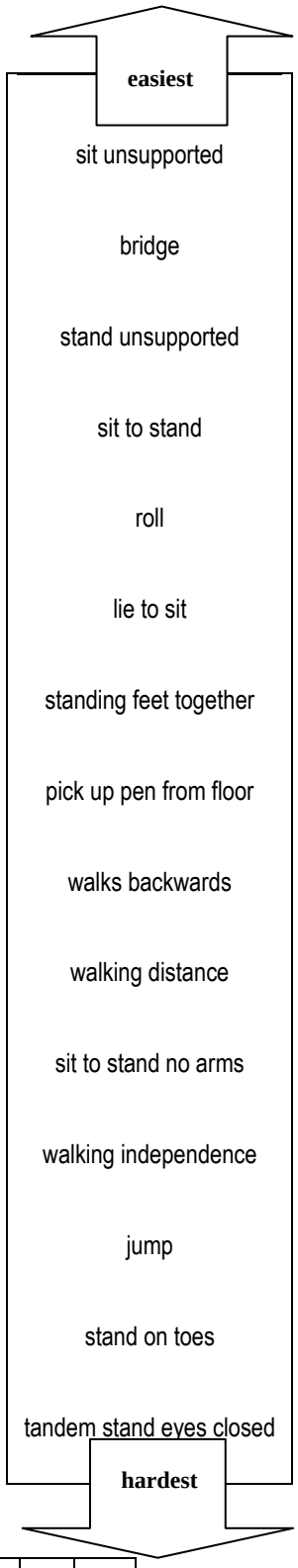
Note: Complete checklist for resident assessed based on level of risk.

de Morton Mobility Index (DEMMI)

	0	1	2
Bed			
1. Bridge	☐ unable	☐ able	
2. Roll onto side	☐ unable	☐ able	
3. Lying to sitting	☐ unable	☐ min assist ☐ supervision	☐ independent
Chair			
4. Sit unsupported in chair	☐ unable	☐ 10 sec	
5. Sit to stand from chair	☐ unable	☐ min assist ☐ supervision	☐ independent
6. Sit to stand without using arms	☐ unable	☐ able	
Static balance (no gait aid)			
7. Stand unsupported	☐ unable	☐ 10 sec	
8. Stand feet together	☐ unable	☐ 10 sec	
9. Stand on toes	☐ unable	☐ 10 sec	
10. Tandem stand with eyes closed	☐ unable	☐ 10 sec	
Walking			
11. Walking distance +/- gait aid *Gait aid (circle): nil/frame/stick/other*	☐ unable ☐ 5m	☐ 10m ☐ 20m	☐ 50m
12. Walking independence	☐ unable ☐ min assist ☐ supervision	☐ independent with gait aid	☐ independent without gait aid
Dynamic balance (no gait aid)			
13. Pick up pen from floor	☐ unable	☐ able	
14. Walks 4 steps backwards	☐ unable	☐ able	
15. Jump	☐ unable	☐ able	
COLUMN TOTAL SCORE:			

RAW SCORE TOTAL (sum of column total scores) _____ /19

DEMMI SCORE (MDC_{90} = 9 points; MCID = 10 points) _____ /100



Raw-DEMMI Score Conversion Table

Raw Score	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
DEMMI score	0	8	15	20	24	27	30	33	36	39	41	44	48	53	57	62	67	74	85	100

Comments:

Signature:_____ Date:_____

ITEM INSTRUCTIONS

Bed

1. Person is lying supine and is asked to bend their knees and lift their bottom clear of the bed.
2. Person is lying supine and is asked to roll onto one side without external assistance.
3. Person is lying supine and is asked to sit up over the edge of the bed.

Chair

4. Person is asked to maintain sitting balance for 10 seconds while seated on the chair, without holding arm rests, slumping or swaying. Knees and feet are placed together and feet can be resting on the floor.
5. Person is asked to rise from sitting to standing using the arm rests of the chair.
6. Person is asked to stand with their arms crossed over their chest.

Static Balance

7. The person is asked if they can stand for 10 seconds without external support.
8. The person is asked if, for 10 seconds, they can stand with their feet together.
9. The person is asked if they can stand on their toes for 10 seconds.
10. The person is asked to place the heel of one foot directly in front of the other with their eyes closed for 10 seconds.

Walking

11. Persons will be asked to walk with their current gait aid to where they can without a rest. Testing ceases if the person stops to rest. The person uses the gait aid that is currently most appropriate for them. If either of two gait aids could be used, the aid that provides the person with the highest level of independence should be used. Testing ceases once the person reaches 50 meters.
12. Independence is assessed over the person's maximum walking distance up to 50m (from item 11).

Dynamic Balance

13. A pen is placed 5 cm in front of the person's feet in standing. The person is asked if they can pick the pen up off the floor.
14. Walks backwards 4 steps. Person remains steady throughout.
15. Person can jump. Both feet clear the ground. Person remains steady throughout.

Definitions

Minimal assistance = "hands on" physical but minimal assistance, primarily to guide movement.
Supervision = another person monitors the activity without providing hands on assistance. May include verbal prompting.
Independent = the presence of another person is not considered necessary for safe mobility.

PROTOCOL FOR ADMINISTRATION OF THE DEMMI

1. Testing should be performed at the person's bedside.
2. Testing should be performed when the person has adequate medication eg. at least half an hour after pain or Parkinson's Disease medication.
3. The test should be administered in the sequence described in sections A-E: bed transfers, chair transfers, static balance, walking and dynamic balance.
4. Each item should be explained and, if necessary, demonstrated to the person.
5. Items should be ticked to indicate item success or failure. Reasons for not testing items should be recorded.
6. Items should not be tested if either the test administrator or the person performing the test are reluctant to attempt the item.
7. Persons should be scored based on their first attempt.
8. If an item is not appropriate given a person's medical condition, the item should not be tested and the reason recorded.
9. Persons can be encouraged but feedback should not be provided regarding performance.
10. Three equipment items are required: chair with 45cm seat height with arm rests, a hospital bed or plinth and a pen.
11. The person administering the test manipulates person medical equipment during testing (eg. portable oxygen, drips, drains etc) unless the person requires minimal assistance to perform the test and then a 2nd person will be required to assist with medical equipment.
12. For persons that require a rest after each item due to shortness of breath, a 10 minute rest should be provided half way through testing i.e. after completing the chair transfers section.
13. For person's who have low level mobility and require a hoist to transfer in/out of bed or chair, the chair section can be administered before the bed section for these persons.
14. Bed transfers: the bed height should be appropriate for the individual person. A standardised hospital bed or plinth should be used for testing. The person cannot use an external device such as the monkey bar, bed rail, edge of bed or a bed pole. Additional pillows may be provided for persons who are unable to lie flat in supine.
15. Chair transfers: A standardised chair height of 45cm is required. A firm chair with arms should be used.
16. Balance: Shoes cannot be worn for balance testing. The person cannot use external support to successfully complete any balance items. For sitting balance, neither the arm rests or the back of the chair can be used for external support. Standing balance tests should be performed with the person positioned between an elevated bed on one side and the test administrator on the other side. If a person displays unsteadiness or significant sway during testing, testing of that item should cease.
17. Walking: Appropriate shoes can be worn for walking tests. The same shoes must be worn for repeat testing.
18. Scoring: Using the conversion table provided, the raw score total must be converted to a DEMMI SCORE.

The development of the DEMMI has been supported by a post graduate scholarship from the National Health and Medical Research Council of Australia (Dora Lush Postgraduate Scholarship, Grant no. 280632), funded by the HCF Health and Medical Research Foundation and also supported by The Northern Clinical Research Centre, Northern Health.

The DEMMI should be cited as: de Morton NA, Davidson M, Keating JL. The de Morton Mobility Index (DEMMI): an essential health index for an ageing world. *Health and Quality of Life Outcomes* 2008, 6:63.

Floor to Stand Transfer

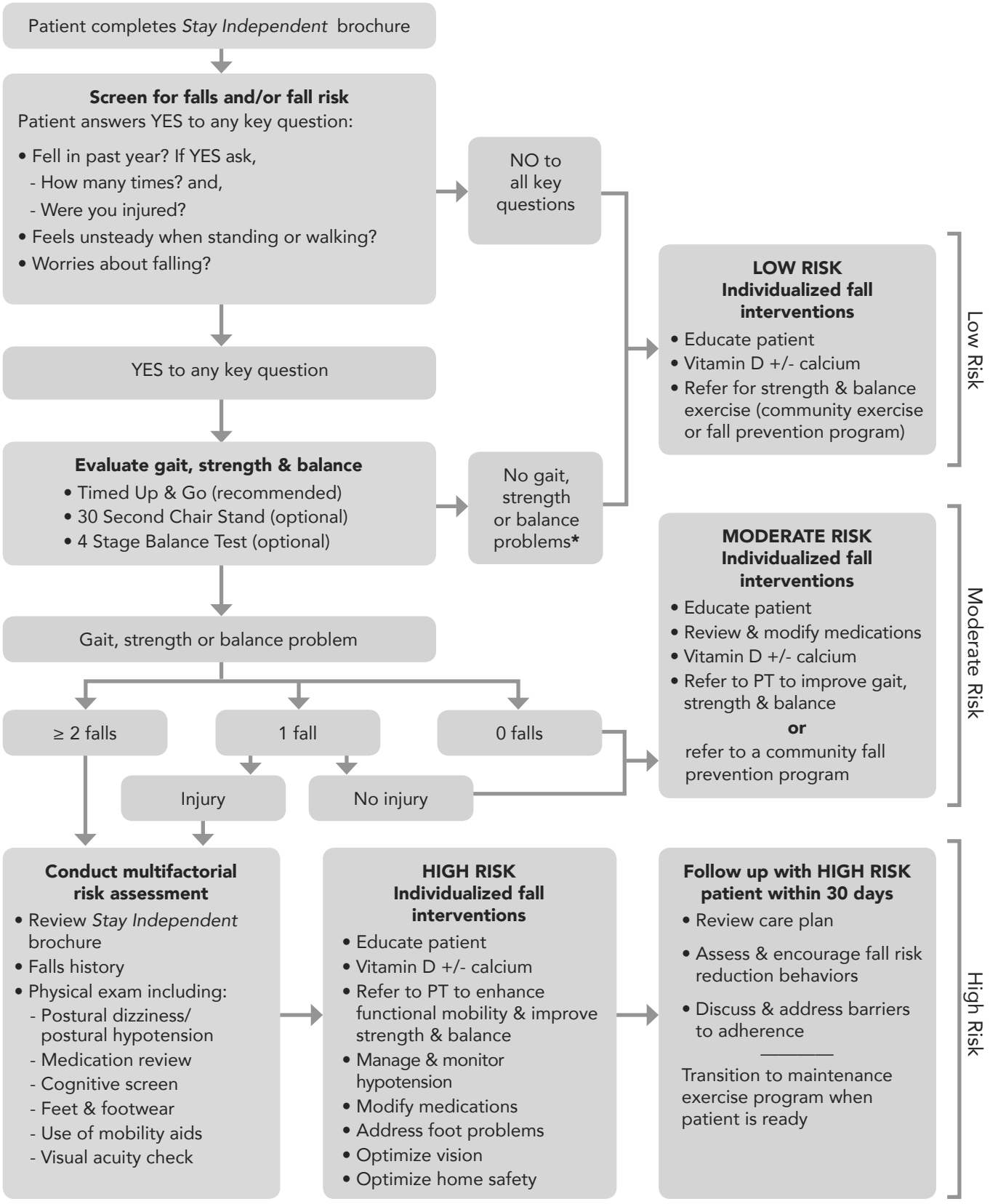
1. Have the patient start seated in a chair
2. Move to the floor and down to a seated position if able
3. Move back up to kneeling, then to 1 knee then stand up

What muscles are activated and in what way?

Modifications may be done as needed

Even chair sit to half kneel will activate muscles in ways we don’t always exercise our residents

Algorithm for Fall Risk Assessment & Interventions



*For these patients, consider additional risk assessment (e.g., medication review, cognitive screen, syncope)

Centers for Disease Control and Prevention
National Center for Injury Prevention and Control

STEADI Stopping Elderly Accidents, Deaths & Injuries

Therapy Discharge Recommendations – Sample

Date: _____ Name: _____

You are being discharged to:

_____

Precautions:

_____

Home exercise programs: (if given in writing note this on line below)

PT: _____

OT: _____

Speech/swallowing:

_____

Training completed during your stay:

_____

_____

Recommendations for next level of care:

_____

_____

We want to remind you that someone from the rehab program will be calling you at 30/60 and 90 days after your discharge to see how you are doing.

Signatures:

_____

_____

_____

IDT Discharge Care Transitions Checklist

- Order for discharge given by MD
- Patient and family aware of d/c date and recommendations for care transition
- DME obtained
- Follow up appointments made
    - Patient notified in writing
    - Transportation established
- Referral made for next level of care
- Labs and any other tests (such as PTINR) sent to community MD
    - Also to HHA if appropriate
- PT/OT/ SLP discharge summaries completed
- Therapy provided & reviewed written discharge recommendations with patient/family, including but not limited to home exercise programs
- Medication review performed with patient/family
- Patient/family training has been completed and competence demonstrated
- Review of discharge paperwork was completed with patient/family by discharging nurse

Tracking sheet for post-dc calls

	30-day post d/c Date	60 -day post d/c Date	90-day post d/c Date	Comments
Have you seen your doctor since d/c?				
Have you fallen or had any injuries?				
Have you been to the ED/ER?				
Have you been in the hospital?				
Are you getting any therapy? If Yes, note type and location				
Are you having any problems?				
Any questions?				

Recommend inserting grid in EMR but if not an option, can put on paper with name/DOB and d/c date on top

Documentation Audit Samples

Please check your payers, state laws and accreditation organizations for compliance specifics;

Add date of audit, patient identifiers if needed

Could also add outcome or plan if doing multiple records and want to use for QAPI or staff education

Evaluation metrics	Yes	No	N/A	Comments
1. History including PLOF and home environment				
2. Diagnosis, co-morbidities, social support, cognitive level , ICD-10 and functional limitations				
3. Examination of systems				
4. Tests performed (at least 1) with findings documented				
5. Assessment – synthesis of findings; problem list; influences on expected outcomes				
6. Prognosis				
7. Plan of care: goals stated in measureable terms; short and long term				
8. Plan of care: interventions expected to be used; includes if PTA or OTA can treat				
9. Plan of care: frequency & duration – no ranges				
10. Anticipated discharge plans				
11. Billing completed (evaluation & treatment)				
12. Signature, title, license #				
13. Corresponding note to document evaluation, level of evaluation being billed & treatment done on day of evaluation				
14. Orders signed by MD				

Documentation Audit Samples

Daily visit notes	Yes	No	N/A	Comments
1. Date				
2. Subjective reports from patient (if apply to treatment)				
3. Documentation of specific interventions including frequency, duration and intensity. Should equate to CPT codes billed				
4. Patient response to interventions noted				
5. Documentation if interventions had to be modified				
6. Communication with other members of IDT, family (if assistant, communication w/ registered therapist0				
7. Plan of care: plan for next visit noted (with specifics)				
8. Plan of care: interventions expected to be used; includes if PTA or OTA can treat				
9. Plan of care: changes needed or continuation				
10. Signature, title, license # if appropriate				

Progress notes – can include daily note and document accordingly; daily note is not a PN	Yes	No	N/A	Comments
1. Date; label of PN				
2. Note number				
3. Information regarding current status of patient – note illness, changes in precautions or medications or other issues that have impacted care				
4. Documentation of progress, (or lack of) between this note and the eval or previous note				
5. Retests performed (or new tests if appropriate)				
6. Assessment – synthesis of findings; factors that may cause modification of treatment interventions, progression toward goals. Include patient carryover of				

Documentation Audit Samples

training, family training				
7. Communication with MD, IDT, family, caregivers etc...				
8. Document modifications in POC including goals update; d/c plans change				
9. Signature, title, license # if appropriate				
10. Orders signed by MD if needed				

Progress Note can include a Daily note -= must document accordingly

Daily note is NOT a Progress Note

Discharge/Discontinuation (can be final daily note if PT doing d/c treats patient that day)	Yes	No	N/A	Comments
1. Date				
2. Current physical/functional status				
3. Outcome of retests				
4. Degree goals and outcomes were met and reason if any were not achieved				
5. Criteria for discharge/termination of services				
6. Discharge plan including recommendations regarding continuation of care.				
7. Documentation of any patient/family/caregiver training done, including issuing of exercise program to be performed after d/c. Note verbal versus written training. Note if therapist communicated with next care transition therapist.				
8. Signature, title, license # if appropriate				
9. Signature, title, license #				

Supplemental Websites

1. CJR and Bundled Payment:
    a. https://www.cms.gov/Newsroom/MediaReleaseDatabase/Fact-sheets/2016-Fact-sheets-items/2016-12-20.html
    b. https://innovation.cms.gov/Files/x/cjr-faq.pdf
2. FY 2017 Final Rule:
    a. https://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/AcuteInpatientPPS/FY2017-IPPS-Final-Rule-Home-Page.html
3. IMPACT Act, QRP, VBP, QAPI:
    a. Center for Medicare and Medicaid Services. *Nursing Home Quality* **http://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/NursingHomeQualityInits/index.html**
    b. https://www.cms.gov/Outreach-and-Education/Outreach/NPC/National-Provider-Calls-and-Events-Items/2016-09-14-SNF.html
    c. **https://www.cms.gov/Mediare/Quality-Initiatives-Patient-Assessment-Instruments/NursingHomeQualityInits/Skilled-Nursing-Facility-Quality-Reporting-Program/SNF-Quality-Reporting-Program-IMPACT-Act-2014.html**
    d. https://www.com.gov/ Mediare/Quality-Initiatives-Patient-Assessment-Instruments/Value-Based-Programs/Other-VBPs/SNF-VBP.html

Supplemental Websites

e. https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/NursingHomeQualityInits/Skilled-Nursing-Facility-Quality-Reporting-Program/SNF-Quality-Reporting-Program-Measures-and-Technical-Information.html

f. https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/NursingHomeQualityInits/Downloads/SNF-QRP-Requirements-for-FY18-Reporting-Year-Fact-Sheet_updated.pdf

g. https://www.cms.gov/Medicare/Provider-Enrollment-and-Certification/QAPI/qapidefinition.html

4. Federal Register FY 2017:

   a. https://www.gpo.gov/fdsys/pkg/FR-2016-08-05/pdf/2016-18113.pdf

5. Federal Register FY 2016:

   a. https://www.federalregister.gov/articles/2015/08/04/2015-18950/medicare-program-prospective-payment-system-and-consolidated-billing-for-skilled-nursing-facilities

6. Medicare Benefit Policy Manual Chapter 15 (Rehab guidelines):

   a. https://www.cms.gov/Regulations-and-Guidance/Guidance/Manuals/downloads/bp102c15.pdf

7. Therapy documentation & CPT codes:

   a. http://www.apta.org/uploadedFiles/APTAorg/Payment/Reform/NewEvalCodesQuickGuide.pdf

Supplemental Websites

b. http://www.aota.org/advocacy-policy/federal-reg-affairs/coding.aspx
c. http://www.apta.org/EvalCodes/
d. http://www.apta.org/Documentation/DefensibleDocumentation

8. CMS RAI manual:
    a. https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/nursingHomeQualityInits/MDS30RAIManual.html
9. Team Communication:
    a. https://www.ahrq.gov/teamstepps/index.html
    b. http://www.in.gov/isdh/files/Doc_7_-_Interact_Stop_and_Watch_Tool.pdf
10. Others:
    a. National Institute of Health https://www.nia.nih.gov/
    b. National Center for Injury Prevention and Control http://cdc.gov/injury/
    c. CAM delirium test: www.hospitalelderlifeprogram.org

Sample Home Questionnaire

Name/Address: _____

	Bedrooms: 1. **Primary bedroom** 2. **Entrance/door width** 3. **Accessibility of bedroom** 4. **Bathroom attached** 5. **Bed height** 6. **Other obstacles**	
	Bathrooms: 1. **Number** 2. **Location per floor** 3. **Width of doors** 4. **Can primary bath accommodate a w/c or walking device?** 5. **Can bathroom accommodate a tub bench, versa frame or other DME?** 6. **Are there any grab bars in shower or toilet bars present?**	
	Bathroom set up: 1. **Tub/shower/ height of lip** 2. **Toilet height (from floor)**	
	Entrance to home: 1. **Via garage?** 2. **Via outside? If yes, is there a flat surface walkway?** 3. **Stairs to enter? Rails?** 4. **Step to enter home? Width of door?**	
	Inside home: 1. **Stairs or step downs** 2. **Kitchen set up and type of chairs used** 3. **Hallways** 4. **Laundry** 5. **Floor types (carpet/wood/tile/other)** 6. **Living room or sitting areas**	

Sample Home Questionnaire

Name/Address: _____

	7. Height of chairs	
	Pets? Type and number **1. Who is responsible to feed them?** **2. Location of food/bowls?**	
	Other features/concerns	