Modified Balance Evaluation Systems Test (mMini-BESTest) instructions

Perform this test if patient meets the following stage: 2B) Moderate Assist: ability to stand and initiate reciprocal steps through voluntary L/E movement but requires moderate physical assistance (25-50% of total effort) of one person and may include use of assistive devices and/or orthoses with the exception of the bilateral KAFOs

Time needed to Complete Assessment: Can be completed over multiple sessions. Approximate time will be included for each subtest.

Equipment Needed: Temper® foam (also called T-foam™ 4 inches thick, medium density T41 firmness rating), chair with arm rests or wheels, incline ramp, stopwatch, a box (9” height) and a 3 meter distance measured out and marked on the floor with tape [from chair].

Therapist Instructions:
Subject Conditions: Subject should be tested with flat-heeled shoes OR shoes and socks off. They should not be wearing any foot or ankle bracing.
Scoring: The test has a maximum score of 28 points from 14 items that are each scored from 0-2. “0” indicates the lowest level of function and “2” the highest level of function.
If a subject must use an assistive device for an item, score that item one category lower.
If a subject requires physical assistance to perform an item, score “0” for that item.
For Item 3 (stand on one leg) and Item 6 (compensatory stepping-lateral) only include the score for one side (the worse score).
For Item 3 (stand on one leg) select the best time of the 2 trials [from a given side] for the score.
For Item 14 (timed up & go with dual task) if a person’s gait slows greater than 10% between the TUG without and with a dual task then the score should be decreased by a point.

1. SIT TO STAND
Note the initiation of the movement, and the use of the subject’s hands on the seat of the chair, the thighs, or the thrusting of the arms forward.

2. RISE TO TOES
Allow the subject two attempts. Score the best attempt. (If you suspect that subject is using less than full height, ask the subject to rise up while holding the examiners’ hands.) Make sure the subject looks at a non-moving target 4-12 feet away.

3. STAND ON ONE LEG
Allow the subject two attempts and record the times. Record the number of seconds the subject can hold up to a maximum of 20 seconds. Stop timing when the subject moves hands off of hips or puts a foot down. Make sure the subject looks at a non-moving target 4-12 feet ahead. Repeat on other side.
4. COMPENSATORY STEPPING CORRECTION--FORWARD
Stand in front of the subject with one hand on each shoulder and ask the subject to lean forward (Make sure there is room for them to step forward). Require the subject to lean until the subject’s shoulders and hips are in front of toes. After you feel the subject’s body weight in your hands, very suddenly release your support. The test must elicit a step. NOTE: Be prepared to catch subject. A small readjustment step is allowed and not counted.

5. COMPENSATORY STEPPING CORRECTION--BACKWARD
Stand behind the subject with one hand on each scapula and ask the subject to lean backward (Make sure there is room for the subject to step backward.) Require the subject to lean until their shoulders and hips are in back of their heels. After you feel the subject’s body weight in your hands, very suddenly release your support. Test must elicit a step. NOTE: Be prepared to catch subject. A small readjustment step is allowed and not counted.

6. COMPENSATORY STEPPING CORRECTION--LATERAL
Stand to the side of the subject, place one hand on the side of the subject’s pelvis, and have the subject lean their whole body into your hands. Require the subject to lean until the midline of the pelvis is over the right (or left) foot and then suddenly release your hold. NOTE: Be prepared to catch subject. A small readjustment step is allowed and not counted.

7. STANCE (FEET TOGETHER); EYES OPEN, FIRM SURFACE
Record the time the subject was able to stand with feet together up to a maximum of 30 seconds. Make sure subject looks at a non-moving target 4-12 feet away.

8. STANCE (FEET TOGETHER); EYES CLOSED, FOAM SURFACE
Use medium density Temper® foam, 4 inches thick. Assist subject in stepping onto foam. Record the time the subject was able to stand in each condition to a maximum of 30 seconds. Have the subject step off of the foam between trials. Flip the foam over between each trial to ensure the foam has retained its shape.

9. INCLINE EYES CLOSED
Aid the subject onto the ramp. Once the subject closes eyes, begin timing and record time. Note if there is excessive sway.

10. CHANGE IN SPEED
Allow the subject to take 3-5 steps at normal speed, and then say “fast”. After 3-5 fast steps, say “slow”. Allow 3-5 slow steps before the subject stops walking.

11. WALK WITH HEAD TURNS--HORIZONTAL
Allow the subject to reach normal speed, and give the commands “right, left” every 3-5 steps. Score if you see a problem in either direction. If subject has severe cervical restrictions allow combined head and trunk movements. Veering from the intended direction is considered an imbalance.

12. WALK WITH PIVOT TURNS
Demonstrate a pivot turn. Once the subject is walking at normal speed, say “turn and stop.” Count the number of steps from “turn” until the subject is stable. Imbalance may be indicated by wide stance, extra stepping or trunk motion.

13. STEP OVER OBSTACLES
Place the box (9 inches or 23 cm height) 10 feet away from where the subject will begin walking. Two shoeboxes taped together works well to create this apparatus.

14. TIMED UP & GO WITH DUAL TASK

Use the TUG time to determine the effects of dual tasking. The subject should walk a 3 meter distance. TUG: Have the subject sitting with the subject’s back against the chair. The subject will be timed from the moment you say “Go” until the subject returns to sitting. Stop timing when the subject’s buttocks hit the chair bottom and the subject’s back is against the chair. The chair should be firm with arms. TUG With Dual Task: While sitting determine how fast and accurately the subject can count backwards by threes starting from a number between 100-90. Then, ask the subject to count from a different number and after a few numbers say “Go”. Time the subject from the moment you say “Go” until the subject returns to the sitting position. Score dual task as affecting counting or walking if speed slows (>10%) from TUG and or new signs of imbalance. Counting is considered affected by either increased errors or slower speed.

**Patient Instructions:** Instructions given for each specific test by therapist included on Mini-BESTest form.