

## Four Square Step Test (FSST)

### Equipment:

- 36" square constructed from 1" diameter wood or PVC pipe, divided into 18"x18" smaller squares
- Stopwatch

### Purpose:

- Assess dynamic balance with change of directions and ability to follow instructions
- Tests moving in 4 directions while stepping over low objects.

### Procedure:

1. Subject starts in the back-left quadrant and then steps forward to the left-front quadrant with both feet, then to the right-front quadrant with both feet, then to the right-back quadrant with both feet, then again to the left-back quadrant with both feet, then reverses directions.
2. Time starts when first foot touches the left-front quadrant and stops when both feet return to the left-back quadrant. Individual is encouraged to face forward at all times.
3. Examiner should demonstrate, allow one practice trial, then up to three trials to get two valid timed trials.
4. No instructions should be given during the timed trials.

### Invalid trials include:

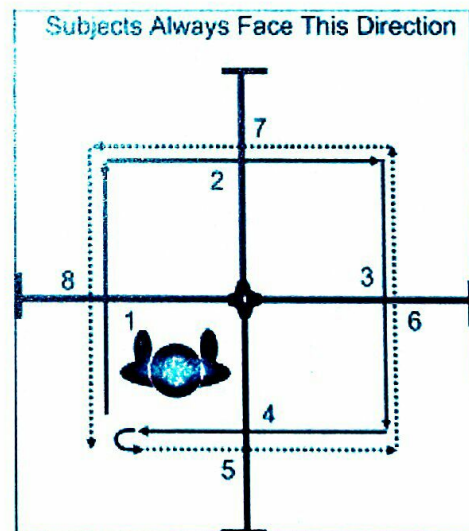
- Feet touching the side walls while stepping into any of the 4 squares
- Any loss of balance
- Not getting both feet to touch the floor in any of the 4 squares

Greater than 15 sec is at risk for falls in community dwelling aging adults

Record:

Time required to perform:

Trial 1 \_\_\_\_\_ Trial 2: \_\_\_\_\_



Validity was done with Step test, Functional Reach and TUG (P<.1)

Inter rater Reliability (ICC=.99), Retest Reliability (ICC=.98)

Sensitivity=85%, specificity 88-100%, and positive predictive value= 86%

Dite and Temple. "A clinical test of stepping and change of direction to identify multiple falling older adults". Arch of PM & R. 83 (11): 1566-71, 2002 Nov.