# Four Step Square Test Instructions

General Information:

- The patient is instructed to stand in square 1 facing square number 2 (see figure below)
- The patient is required to step as fast as possible into each square in the following sequence: 2, 3, 4, 1, 4, 3, 2, and 1
  - requires the patient to step forward, backward, and sideway to the right and left
- Equipment required for the FSST includes a stopwatch and 4 canes.

Set-up (derived from Dite and Temple 2002): A square is formed with the 4 canes by resting them flat on the floor.
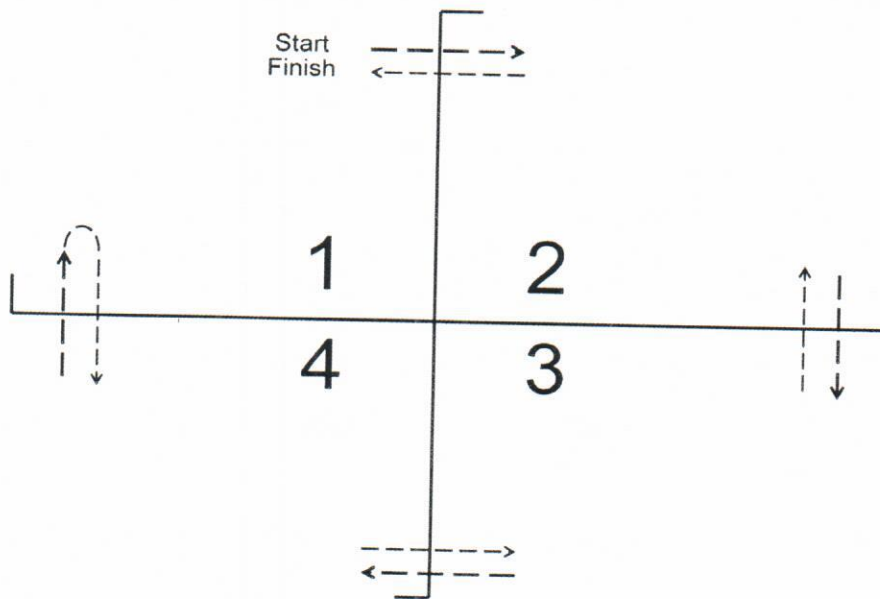
Patient Instructions (derived from Dite and Temple 2002):

- "Try to complete the sequence as fast as possible without touching the sticks. Both feet must make contact with the floor in each square. If possible, face forward during the entire sequence."
- Demonstrate the sequence to the patient.
- Ask the patient to complete one practice trial to ensure the patient knows the sequence. Repeat the trial if the patient is unsuccessful

Test instructions provided courtesy of Wayne Dite

at completing the sequence, loses balance, or contacts a cane during the trial.
- Two FSST are completed with the best time taken as the score.
- A score is still provided if the patient is unable to face forward during the entire sequence.

Scoring:
- the best time of two FSST is the score
- stopwatch starts when the first foot contacts the floor in square 2
- stopwatch finishes when the last foot comes back to touch the floor in square 1

Older Adults/ Geriatric: (Dite & Temple, 2002; n = 81 community dwelling adults > 65 years old)

- >15s = at risk for multiple falls

Vestibular: (Whitney et al, 2007; n = 32; mean age = 63.7 (17.8) years)

- >12s = at risks for falls

Transtibial Amputees: (Dite et al, 2007; n = 40; 13 multiple fallers mean age 65.23 (11.18) years, & 27 non-fallers mean age 59.93 (14.28) years, retest 6 months later)

- >24s = at risk for falls

Acute Stroke: (Blennerhassett and Jaylath, 2008; n=37; mean age=53(range 23-75) years, time since stroke=66 (range 9-1094) months; FIM walking item range 4-7, Australian sample):

- Failed attempt or > 15 seconds= increased risk for falls

From Rehab Measures DataBase - more online