

# Functional Reach Test and Modified Functional Reach Instructions

General Information: The Functional Reach test can be administered while the patient is standing (Functional Reach) or sitting (Modified Functional Reach).

## Functional Reach (standing instructions):

- The patient is instructed to next to, but not touching, a wall and position the arm that is closer to the wall at 90 degrees of shoulder flexion with a closed fist.
- The assessor records the starting position at the 3rd metacarpal head on the yardstick.
- Instruct the patient to “Reach as far as you can forward without taking a step.”
- The location of the 3rd metacarpal is recorded.
- Scores are determined by assessing the difference between the start and end position is the reach distance, usually measured in inches.
- Three trials are done and the average of the last two is noted.

## Modified Functional Reach Test (Adapted for individuals who are unable to stand):

- Performed with a leveled yardstick that has been mounted on the wall at the height of the patient’s acromion level in the non-affected arm while sitting in a chair
- Hips, knees and ankles positioned are at 90 degree of flexion, with feet positioned flat on the floor.
- The initial reach is measured with the patient sitting against the back of the chair with the upper-extremity flexed to 90 degrees, measure was taken from the distal end of the third metacarpal along the yardstick.
- Consists of three conditions over three trials
  - Sitting with the unaffected side near the wall and leaning forward
  - Sitting with the back to the wall and leaning right
  - Sitting with the back to the wall leaning left.

- Instructions should include leaning as far as possible in each direction without rotation and without touching the wall
- Record the distance in centimeters covered in each direction
- If the patient is unable to raise the affected arm, the distance covered by the acromion during leaning is recorded
- First trial in each direction is a practice trial and should not be included in the final result
- A 15 second rest break should be allowed between trials

Set-up:

- A yardstick and duck tap will be needed for the assessment.
- The yardstick should be affixed to the wall at the level of the patient's acromion.

References:

- Duncan, P. W., D. K. Weiner, et al. (1990). "Functional reach: a new clinical measure of balance." J Gerontol **45**(6): M192-197.
- Katz-Leurer, M., I. Fisher, et al. (2009). "Reliability and validity of the modified functional reach test at the sub-acute stage post-stroke." Disabil Rehabil **31**(3): 243-248.
- Weiner, D. K., D. R. Bongiorno, et al. (1993). "Does functional reach improve with rehabilitation?" Arch Phys Med Rehabil **74**(8): 796-800.
- Weiner, D. K., P. W. Duncan, et al. (1992). "Functional reach: a marker of physical frailty." J Am Geriatr Soc **40**(3): 203-207.

# Functional Reach Test and Modified Functional Reach Score Sheet

Name: \_\_\_\_\_

## Instructions:

Instruct the patient to “Reach as far as you can forward without taking a step”

## Score Sheet:

| Date | Trial One<br>(Practice) | Trial Two | Trial Three | <b>Total (average<br/>of trial 2 and 3<br/>only)</b> |
|------|-------------------------|-----------|-------------|--|
|      |                         |           |             |  |
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