FUNCTIONAL REACH

The Functional Reach Test is a quick screen for determining risk for falls in older adults. The individual is ask to stand erect with their feet at shoulder length apart and with one arm elevated to 90 degrees of shoulder flexion. The arm is parallel to a "yard stick" that has been secured to the wall at acromion height. The individual places their closed fist against the "yard" stick and slides the fist as far forward as they comfortable can without moving their feet or losing their balance. No attempt is made to control the method of reach. Functional reach is the difference in inches between the two positions of the fist on the "yard stick". The test is usually performed three times and the results are averaged. Age related norms are follows: [1]

Age	Men			Women	YE
Age	Mean	SD		Mean	SD
20-40		16.7	1.9	14.6	2.2
41-40		14.9	2.2	13.8	2.2
70-87		13.2	1.6	10.5	3.5

The association between 2 falls in the six months following testing and the Reach Scores are as follow: [2]

Reach Score	Odds Ratio Adjusted for Age, Folstein, Depression
0 = Unable to reach	8.07
1 = Reach $\leq$ 6 inches	4.02
2 = Reach $\geq$ 6 but $\leq$ 10 inches	2.00
3 = Reach $\geq$ 10 inches	1.00

A Reach Score of 6 inches or less indicates that an individual is at a high risk for falls.[3]

1. Duncan PW, Weiner DK, Chandler J, Studenski S. Functional Reach: a new clinical measure. J Ger, 45: M192-197, 1990.
2. Duncan PW, Studenski S, Chandler J, Prescott B. Functional Reach: Predictive validity in a sample of elderly male veterans. J Ger, 47:M93-98, 1992
3. Duncan PW, personal communication