

Functional Reach Test (FRT)**Performance Measure**

Considerations	
Which type of TJA is it appropriate for?	THA and TKA
What part of the TJA continuum is it appropriate for?	Pre-op Post-acute ¹ Active Living
What domain(s) does it measure within the ICF?	Activity
Who completes it?	Patient and clinician
What does it measure?	Static balance through maximal forward reach from a fixed base of support ²
What equipment is required?	Tape measure or pre-measured intervals marked on wall at shoulder level
How long does it take?	~ 5 mins to complete and score
How do I do it?	Instructions available at: ² www.rehabmeasures.org/PDF%20Library/Functional%20Reach%20Test.pdf
How good is it?	Validity: Concurrent – good, correlates with walking speed, tandem walk, and 1-footed stand in community dwelling elderly. ³ Reliability: Inter-rater and test-retest- excellent for adults aged 20 – 87 years. ⁴ Responsiveness: Ability to detect change in TJA or OA population not established. In 22 community-dwelling adults with knee OA, the FRT improved from 20 cm to 28 cm after a 10-week PT-led aquatic exercise program. ⁵ Floor/ceiling effects: Not established in TJA ¹
How is it scored?	Scores are determined by assessing the difference between the start and end position. Three trials are done and average of last two noted.
What do the results mean?	Greater value (distance) = better balance and decreased falls risk. In community dwelling elders, < 17.5 cm suggests limited mobility skills, inability to leave the neighborhood without help, and restriction in ADLs. ³ In frail elderly patients, <18.5 cm reach indicates fall risk. ⁶ Based on a Canada-wide sample of 2,305 elderly people, the median FRT distance was 29 cm in cognitively unimpaired subjects. ⁷
Where can I get it?	Available at: www.rehabmeasures.org/PDF%20Library/Functional%20Reach%20Test.pdf Video link: www.youtube.com/watch?v= ajqJzt-U2s

References

1. Westby MD, Brittain A, Backman CL. Expert consensus on best practices for post-acute rehabilitation after total hip and knee arthroplasty: A Canada-US Delphi study. *Arthritis Care Res.* 2014;66(3):411-23.
2. Rehab Measures: Functional Reach Test / Modified Functional Reach Test (2013). Available at: www.rehabmeasures.org/Lists/RehabMeasures/PrintView.aspx?ID=950
3. Weiner DK, Duncan PW, et al. Functional reach: a marker of physical frailty. *J Am Geriatr Soc.* 1992; 40(3):203-7.
4. Duncan PW, Weiner DK, et al. Functional reach: new clinical measure of balance. *J Gerontol.* 1990;45(6):M192-7.
5. Lau MCK, Lam JKS, et al. Physiotherapist-designed aquatic exercise programme for community-dwelling elders with osteoarthritis of the knee: a Hong Kong pilot study. *Hong Kong Med J* 2014;20(1):16-23.
6. Thomas JJ, Lane JV. A pilot study to explore the predictive validity of 4 measures of falls risk in frail elderly patients. *Arch Phys Med Rehabil* 2005;86(8):1636-40.
7. Rockwood K, Awalt E, et al. Feasibility and measurement properties of the Functional Reach and the Timed Up and Go tests in the Canadian Study of Health and Aging. *J Gerontol A Biol Sci Med Sci* 2000;55(2):M70-3.