

Lower Extremity Functional Scale (LEFS)

Measures current ability to do common activities at home, work, school, recreation & sport

Phases

Pre-op
Post-acute
Active living



Activity
Participation



~ 5 mins to
complete and score



Print & electronic
versions



Quality



Validity

Convergent: THA/TKA: High correlation ($r=0.76-0.85$) with WOMAC physical function subscale at 2 & 3-wks post-op^{2,3}, moderate to low correlations with performance-based measures including TUG ($r=0.47$) & self-paced walking speed ($r=0.44$).⁴ Hip OA: High correlations ($r>0.7$) with WOMAC physical function.⁴

Known-Group Validity: THA/TKA: LEFS able to differentiate between patients receiving home rehabilitation versus those who did not.⁴



Reliability

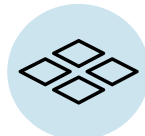
Internal Consistency: THA/TKA: High ($ICC=0.93$) 1-mo post-op⁴; Primarily THA/TKA (inpatient rehab): $ICC=0.885$

Test-retest reliability: THA/TKA: Excellent for 1-day ($r=0.88$)⁵ and 1-wk ($r=0.85$)⁴ recall periods; Hip OA: Excellent ($r=0.92$) with 1-wk recall period.⁶



Responsiveness

THA/TKA: Moderate effect size ($SRM=-0.56$ to -0.68) pre-op to 2-wks post-op & large effect size ($SRM=1.62$) 2 to 5-wks post-op⁴. THA/TKA primary & revision: Significant difference in LEFS change scores of responders (23 points) to non-responders (14 points) after ~3-wks inpatient rehab.⁵ SRM for responders from admission to 7-10 days later = 0.92 .⁵



Floor/ceiling effects

None in patients with hip OA⁶ or after THA/TKA⁴



Feasibility

Quick and easy to complete and score.



Instructions

Ask the patient to rate the level of difficulty performing 20 common daily activities.^{1,2} The recall period of self-reported function is on the day administered. See 'Relevant Links' for detailed instructions.

Scoring: Items scored from 0 (extreme difficulty) to 4 (no difficulty) and summed for total of 0 to 80.



Interpretation

Direction: Higher score = better function

SEM: THA/TKA: 4.0⁵ & across multiple LE conditions: 2.4⁴

MDC₉₀ : THA/TKA = 8-10 points^{1,4,5}

MDC₉₀ : Hip/knee OA = 10-15 points^{4,7}

MDC₉₅ : Hip/knee OA = 10-12 points^{4,6,7}

MCID: THA/TKA: 9 points^{1,8}; Knee OA: After a 6-8-wk exercise program MCID=5.5 points at 0-2-mos & 8.5 points at 0-6 mos.⁹

Cut points/Thresholds: No evidence found

PASS: No evidence found

Normative/Reference values: Healthy Dutch adults: median score = 76 for women & 78 for men¹⁰



Other

Key messages: Provisionally recommended. Valid and reliable. Studies in TKA/THA populations have demonstrated no ceiling/floor effect and excellent responsiveness (able to detect changes early post-op TKA/THA). Useful for informing clinical resource allocation decisions post hip or knee TJA¹

LEFS is a useful tool for aiding clinical resource allocation decisions post hip or knee TJA.¹

Available in 12 languages.



Relevant Links

[Summary and instructions \(Physiopeedia\)](#)

[Summary, instructions & PDF \(Shirley Ryan AbilityLab\)](#)

[Online fillable or print PDF \(orthotoolkit.com\)](#)



References

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