

LEFS Recommended MCID

After a literature review, we recommend that the Minimal Clinically Important Difference (MCID) value for the Lower Extremity Functional Scale (LEFS) to be used at Advocate Aurora Health (AAH) remain 9 points.

The criteria for making this recommendation are:

1. That the MCID reflects the patient population seen at AAH (all lower extremity musculoskeletal disorders, including surgical diagnoses).
2. That the MCID be greater than the Minimal Detectable Change (MDC).
3. That the MCID be calculated with an anchor-based method (gold standard).

Our strongest reference, a systematic review by Mehta et al.,¹ was conducted in 4 databases and 27 studies were included. The systematic review generated a pooled estimate MDC_{90} that is less than the MCID and also validates the use of the tool across a wide range of lower extremity diagnoses, as it is currently being utilized at AAH. They found the pooled estimate of MDC at 90% confidence was 6 points and the MCID was 9 points. According to Mehta et al.¹ the LEFS is a reliable, valid, and responsive tool for assessing functional status for populations of hip/knee osteoarthritis (OA), total knee replacement, total hip replacement (THA), general lower extremity (LE) dysfunction, and ankle injuries.

The original MCID was determined by Binkley et al.² to be set at 9 when the group developed the LEFS measure in 1999 using a prognostic rating of change and an estimated amount of change that experienced clinicians would deem to be clinically relevant. Additional support for an MCID of 9 points comes from Abbott et al.³ who developed three MCID values for patients with LE musculoskeletal conditions with the 15-point Global Rating of Change (GROC) anchor. They calculated MCID values of 9 points for patients who reported small change, 12 points for patients who reported moderate change, and 16 points for patients who reported large change.

While we did not find additional research which calculated an MCID value, we were able to find several sources that successfully utilized an MCID of 9 points to demonstrate change for a variety of lower extremity diagnoses including patients who have undergone orthopedic surgery⁴, ACL reconstruction⁵, patients diagnosed with OA⁶, and those post-THA^{7,8}.

References:

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