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KOOS JR Recommended MCID

After a literature review, the recommended MCID (Minimal Clinically Important Difference) for the KOOS JR to be used at AAH is 14

The criteria for making this recommendation are:

1. That the MCID reflects the patient population seen at Advocate Health Care, specifically patients undergoing total knee arthroplasty
2. That the MCID be greater than the MDC (Minimal Detectable Change).
3. That the MCID be calculated with an anchor-based method (gold standard).

Multiple articles presented a range for MCID recommendation. Our strongest reference comes from Lyman et al. 2018 who also developed the instrument. The study included 2630 patients who underwent total knee arthroplasty. Based on the findings, Lyman et al. determined 14 points as the MCID.

Kuo et al. 2020 included 858 patients undergoing total joint replacement and suggested a range of 14-20.8 for MCID.

Hung et al. 2018 had 2226 patients with OA and joint reconstruction and determined anchor based MCID for KOOS JR 15.1.

Therefore, as two of the studies recommend a MCID of 14 for patient population undergoing total knee arthroplasty. It is our recommendations that Advocate Health Care utilize the MICD of 14 for the KOOS JR. to accurately evaluate patients receiving total hip arthroplasty.

References:

1. Hung M, Bounsanga J, Voss MW, Saltzman CL. Establishing minimum clinically important difference values for the Patient-Reported Outcomes Measurement Information System Physical Function, hip disability and osteoarthritis outcome score for joint reconstruction, and knee injury and osteoarthritis outcome score for joint reconstruction in orthopaedics. *World J Orthop* 2018; 9(3): 41-49 [PMID: 29564213 DOI: 10.5312/wjo.v9.i3.41]
2. Kuo AC, Giori NJ, Bowe TR, et al. Comparing Methods to Determine the Minimal Clinically Important Differences in Patient-Reported Outcome Measures for Veterans Undergoing Elective Total Hip or Knee Arthroplasty in Veterans Health Administration Hospitals. *JAMA Surg.* 2020;155(5):404–411. doi:10.1001/jamasurg.2020.0024
3. Lyman S, Lee YY, McLawhorn AS, Islam W, MacLean CH. What Are the Minimal and Substantial Improvements in the HOOS and KOOS and JR Versions After Total Joint Replacement? *Clin Orthop Relat Res.* 2018 Dec;476(12):2432-2441. doi: 10.1097/CORR.0000000000000456. PMID: 30179951; PMCID: PMC6259893.