

The criteria for making this recommendation are:

- That the MCID reflects the patient population seen at Advocate Health Care (all Mid-Low Thoracic, Lumbar, & SI conditions, including surgical diagnoses).
- That the MCID be greater than the MDC (Minimal Detectable Change).
- That the MCID be calculated with an anchor-based method (gold standard).

Multiple articles presented a range for MCIDs recommendations for various lumbar condition ranging for non-surgical to surgical interventions.

Vanti et al. 2017 investigated MCID scores for subjects utilizing conservative treatment for Symptomatic specific low back pain associated with lumbar spondylolisthesis. The MDC findings for this article was 4.23 and MCID was 7.5 points.

Asher et al. 2018 study analyzed Posterior lumbar surgery for grade 1 degenerative lumbar spondylolistheses. Utilizing the anchor-based model, the MDIC values are 14.3 point for ODI

Copay et al. 2016 confirmed ODI is a valid measure to detect change in SI joint disorders. The study estimated the MCID for ODI to be 12-15 points.

Our strongest reference is Hung et al 2018 in which the study stated that the ODI has shown good to fair psychometric properties. The study confirmed that 6-point smallest end of the MCID range for ODI is consistent with prior research. Hung et al sited previous referenced studies on MCID values for the ODI values ranged from 6-10 point change. Furthermore, the low end of the range may be relevant for referral to Physical Therapy. The study does mention median to high end MCID range may be more relevant for determining higher risk effects such as return to strenuous labor after back surgery or even when making conclusions about effects of a new treatment being researched.

This accurately reflects our utilization of the Oswestry at Advocate Health Care Rehabilitation Services. Based on the most recent publication that includes a heterogeneous population of Lumbar/Spine related conditions we recommend use of 12% as the MCID.

# MCID Recommendations for Oswestry

## References

1. Asher AL, Kerezoudis P, Mummaneni PV, Bisson EF, Glassman SD, Foley KT, Slotkin JR, Potts EA, Shaffrey ME, Shaffrey CI, Coric D, Knightly JJ, Park P, Fu KM, Devin CJ, Archer KR, Chotai S, Chan AK, Virk MS, Bydon M. Defining the minimum clinically important difference for grade I degenerative lumbar spondylolisthesis: insights from the Quality Outcomes Database. *Neurosurg Focus*. 2018 Jan;44(1):E2. doi: 10.3171/2017.10.FOCUS17554. Erratum in: *Neurosurg Focus*. 2018 Apr;44(4):E15. PMID: 29290132.
2. Copay AG, Cher DJ. Is the Oswestry Disability Index a valid measure of response to sacroiliac joint treatment? *Qual Life Res*. 2016 Feb;25(2):283-292. doi: 10.1007/s11136-015-1095-3. Epub 2015 Aug 6. PMID: 26245709; PMCID: PMC4722083.
3. Hung, Man, et al. "What Are the Mcids for Promis, Ndi, and ODI Instruments among Patients with Spinal Conditions?" *Clinical Orthopaedics & Related Research*, vol. 476, no. 10, 2018, pp. 2027–2036., <https://doi.org/10.1097/corr.0000000000000419>.
4. Vanti C, Ferrari S, Villafaña JH, Berjano P, Monticone M. Responsiveness and minimum important change of the Oswestry Disability Index in Italian subjects with symptomatic lumbar spondylolisthesis. *J Orthop Traumatol*. 2017 Jun;18(2):145-150. doi: 10.1007/s10195-017-0446-y. Epub 2017 Feb 16. PMID: 28210872; PMCID: PMC5429257.