

**Hip disability and Osteoarthritis Outcome Score (HOOS) *Patient Reported Measure***

Considerations	
Which type of TJA is it appropriate for?	THA
What part of the TJA continuum is it appropriate for?	Pre-op Post-acute Active Living
What domain(s) does it measure within the ICF?	Body function, Activity
Who completes it?	Patient
What does it measure?	40-item tool that assesses pain, symptoms, function in daily living (ADL), function in sport and recreation (Sport/Rec) and quality of life (QoL) over the past week. <sup>1,2,5</sup>
What equipment is required?	Paper version: paper copy of HOOS, pen Electronic version: computer with internet access
How long does it take?	~15-20 mins to complete and score <sup>5</sup>
How do I do it?	Instructions available at: <a href="http://www.koos.nu">www.koos.nu</a>
How good is it?	<b>Validity:</b> Construct - good with SF-36, Oxford Hip Score, pain VAS. <sup>3,5</sup> <b>Reliability:</b> Test-retest - good to excellent <sup>1,5</sup> <b>Responsiveness:</b> Able to detect small changes in hip OA in different age groups and more responsive than WOMAC pain and stiffness <sup>3</sup> <b>Floor/ceiling effects:</b> Floor effects more common in Sport/Rec subscale and ceiling effects in pain subscale reported 6 months after THA <sup>3,5</sup>
How is it scored?	Paper version: A spreadsheet for scoring is available at <a href="http://www.koos.nu">www.koos.nu</a> Items scored from 0 to 4. Scores are summarized for each subscale and transformed to 0-100 scale. <sup>5</sup> <i>A total score is not recommended.</i> <sup>1</sup> Electronic version can be scored at: <a href="http://www.orthopaedicscore.com/scorepages/hip_disability_osteoarthritis_outcome_score_hoos.html">www.orthopaedicscore.com/scorepages/hip_disability_osteoarthritis_outcome_score_hoos.html</a>
What do the results mean?	Higher score = better. Score of 100 in each subscale = no hip-related problems; 0 = extreme problems <sup>1</sup> Minimal clinically important improvement (MCII) 1 year after THA is 24 for pain subscale and 17 for QoL subscale; however, MCII values are higher when other calculation methods are used. <sup>6</sup> No MDC or MCID values or norms available for TJA population, hip or knee OA or community dwelling older adults. <sup>4</sup>
Where can I get it?	Paper version available at: <a href="http://www.koos.nu">www.koos.nu</a> Online version available at: <a href="http://www.orthopaedicscore.com/scorepages/hip_disability_osteoarthritis_outcome_score_hoos.html">www.orthopaedicscore.com/scorepages/hip_disability_osteoarthritis_outcome_score_hoos.html</a> Multiple language versions available. A 5-item short version is available (HOOS-PS) <sup>1</sup>

**1**

Developed by the BC Physical Therapy Total Joint Arthroplasty and Outcome Measures Knowledge Translation Task Force: Dr. Marie Westby, Ronda Field, Maureen Duggan, Dolores Langford, Robyn Laytham, Steven Longstaff, Lauren Welch, Alison Hoens. March 2014. A Physical Therapy Knowledge Broker project supported by: UBC Department of Physical Therapy, Physiotherapy Association of BC, Vancouver Coastal Research Institute and Providence Healthcare Research Institute.

**References**

1. Website with users guide: [www.koos.nu/](http://www.koos.nu/)
2. [www.orthopaedicscore.com/scorepages/hip\\_disability\\_osteoarthritis\\_outcome\\_score\\_hoos.html](http://www.orthopaedicscore.com/scorepages/hip_disability_osteoarthritis_outcome_score_hoos.html)
3. Nilsson A-K, Lohmander LS, et al. Hip disability and Osteoarthritis Outcome Score (HOOS) - Validity and responsiveness in total hip replacement. BMC Musculoskel Disorders 2003;4:10.
4. Escobar A, Quintana JM, et al. Responsiveness and clinically important differences for the WOMAC and SF36 after total knee replacement. Osteoarthritis Cartilage 2007;15(3):273-80.
5. Nilsson A, Bremander A. Measures of hip function and symptoms. Patient Outcomes in Rheumatology, A Review of Measures. Arthritis Care Res 2011;63(S11);S200.
6. Paulsen A, Roos EM, et al. Minimal clinically important improvement (MCI) and patient-acceptable symptom state (PASS) in total hip arthroplasty (THA) patients 1 year postoperatively. Acta Orthopaedica 2014;85(1):39-48.