

Functional Assessments for Patients with Knee & Hip Osteoarthritis

Elevating the role of physical function in OA pain management and functional assessment in OA care

1 in 7 U.S. adults has osteoarthritis (OA).^{1*} Approximately 44% of adults with arthritis may be limited in their daily activities.² Pain and stiffness from OA can contribute to disabilities in physical function,³ which can be defined as the ability to 'move around' and 'perform daily activities.'⁴ Limitations in physical function may lead to reduced quality of life.³

There is no single measure to assess a patient's physical function in the setting of research or clinical care for OA.⁴ However, using a combination of **performance measures** and **patient-reported outcome measures** (PROMs) may give the healthcare provider insight into disease progression, severity, and optimal treatment approaches.⁴

Performance Measures

Performance measures assess what patients can do as opposed to what they think they can do.⁴ **The Osteoarthritis Research Society International (OARSI) recommends 5 performance-based tests of physical function for knee and hip OA (at right), with 3 of the tests identified as the minimum core set.**⁴ The tests use activities such as sit-to-stand, timed walks, and stair climbing to assess lower body strength, balance, agility, and ability to change directions.⁵ Not only do these tests represent typical activities that individuals with knee and hip OA might need to do regularly, but they are also practical to administer in a clinic setting.⁴ The [OARSI manual](#) includes instructions, score sheets and normal values for these tests.⁵

Patient-Reported Outcome Measures (PROMs)

PROMs are questionnaires that patients complete to describe how arthritis impacts their lives.⁶ It has been suggested that PROMs reveal patients' **perceived experiences** with the disease and its impact on specific activities rather than their **actual ability** to perform the activities.⁷ Patient self-reports may be influenced by pain, stiffness, and feeling of exertion (not just ability or difficulty in performing the task).⁷

The use of PROMs in clinical care lends itself to shared decision-making. In addition, the process of engaging patients in self-reporting may result in improved self-management, quality of life, satisfaction of care, and communication.³

PERFORMANCE MEASURES

Recommended for Knee and Hip OA⁴

Minimum Core Set

1. 30 second chair stand
2. 40m fast-paced walk
3. Stair climb
4. Timed up-and-go
5. 6-minute walk

Patient-Reported Outcome Measures Commonly Used to Assess Function in Patients with OA

Health-related Quality of Life



Quality of Life

[Rand Short Form-36 Health Survey \(SF-36\)](#)^{8*}

The SF-36 is a generic health-related quality of life assessment⁸ and has been validated in patients with OA.^{9,10} It includes 36 items related to 8 physical and mental health domains such as health perception, physical functioning, physical/emotional limitations, fatigue, pain, social functioning, and mental health.¹¹ It takes about 10 minutes to complete.¹²

The SF-36® is a registered trademark of the Medical Outcomes Trust.

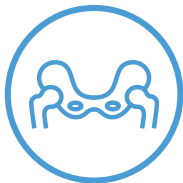
Joint-specific



Knee

[Knee Injury and Osteoarthritis Outcome Score \(KOOS\)](#)^{13*}

The KOOS is a nonproprietary, self-administered questionnaire that evaluates a patient's opinion about their knee and knee function. It contains 5 subscales: pain, other symptoms, function in daily living, function in sport and recreation, and knee related quality of life. The full questionnaire takes about 10 minutes to complete; however, a shorter 12-item version (KOOS-12) is available.¹³



Hip

[Hip Injury and Osteoarthritis Outcome Score \(HOOS\)](#)^{14*}

The HOOS is a nonproprietary, self-administered questionnaire that evaluates a patient's opinion about their hip and hip function. It contains 5 subscales: pain, other symptoms, function in daily living, function in sport and recreation, and knee related quality of life. The full questionnaire takes about 10 minutes to complete; however, a shorter 12-item version (HOOS-12) is available.¹⁴

Work Productivity



Work Productivity, Absenteeism, and Presenteeism

[Work Productivity and Activity Impairment Questionnaire \(WPAI\) for Osteoarthritis Knee or Hip](#)^{15,16*}

The WPAI is a nonproprietary, self-administered questionnaire that uses 6 questions to measure an employee's absenteeism (missed work), presenteeism (reduced job performance), work productivity loss (absenteeism plus presenteeism), and activity impairment in the last 7 days.¹⁶ Scoring for the WPAI is freely available; higher values indicate higher levels of osteoarthritis-related work impairments.^{16,17}

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Visit www.oacaretools.org for more tools and resources, including a PowerPoint presentation with more details about performance measures and PROMs used in OA care.

OAAA collaborated with Pfizer in the development of this resource.

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