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).\textsuperscript{1} Approximately 44% of adults with arthritis may be limited in their daily activities.\textsuperscript{2} Pain and stiffness from OA can contribute to disabilities in physical function,\textsuperscript{3} which can be defined as the ability to ’move around’ and ‘perform daily activities.’\textsuperscript{4} Limitations in physical function may lead to reduced quality of life.\textsuperscript{3}

There is no single measure to assess a patient’s physical function in the setting of research or clinical care for OA.\textsuperscript{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.\textsuperscript{4}

**Performance Measures**

Performance measures assess what patients can do as opposed to what they think they can do.\textsuperscript{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.\textsuperscript{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.\textsuperscript{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.\textsuperscript{4} The OARSI manual includes instructions, score sheets and normal values for these tests.\textsuperscript{5}

**Patient-Reported Outcome Measures (PROMs)**

PROMs are questionnaires that patients complete to describe how arthritis impacts their lives.\textsuperscript{4} 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.\textsuperscript{7} Patient self-reports may be influenced by pain, stiffness, and feeling of exertion (not just ability or difficulty in performing the task).\textsuperscript{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.\textsuperscript{3}

\textsuperscript{1}Reported from 2008 to 2014
**Health-related Quality of Life**

**Rand Short Form-36 Health Survey (SF-36)**

The SF-36 is a generic health-related quality of life assessment\(^8\) 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 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 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 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.\(^17\)

**References**


Visit [www.oacaretools.org](http://www.oacaretools.org) for more tools and resources, including a PowerPoint presentation with more details about performance measures and PROMs used in OA care.

*OA Action Alliance collaborated with Pfizer in the development of this resource.*