QUALITY STANDARDS

Osteoarthritis

Care for Adults With Osteoarthritis of the Knee, Hip, Hand, or Shoulder

2024 UPDATE

Ontario Health

Scope of This Quality Standard

This quality standard addresses care for adults (18 years of age or older) with osteoarthritis of the knee, hip, hand (i.e., thumb or fingers), or shoulder (i.e., the glenohumeral joint). The quality standard focuses on the assessment, diagnosis, and management of osteoarthritis for people across all health care settings and clinicians. It provides guidance on nonpharmacological and pharmacological care. It covers referral for consideration of joint surgery but does not address specific surgical procedures. This quality standard does not apply to care for people with osteoarthritis affecting the spine, other peripheral joints (i.e., elbow, wrist, foot, ankle), or neck or low back pain. Similarly, this quality standard also excludes people with inflammatory arthritis or medical conditions and treatments that can lead to osteoarthritis.

See Ontario Health's *Low Back Pain: Care for Adults With Acute Low Back Pain* and *Chronic Pain: Care for Adults, Adolescents and Children* quality standards for quality statements related to low back pain and chronic pain.

What Is a Quality Standard?

Quality standards outline what high-quality care looks like for conditions or processes where there are large variations in how care is delivered, or where there are gaps between the care provided in Ontario and the care patients should receive. They:

- Help patients, families, and care partners know what to ask for in their care
- Help clinicians know what care they should be offering, based on evidence and expert consensus
- Help health care organizations measure, assess, and improve their performance in caring for patients

Quality standards and their accompanying patient guides are developed by Ontario Health, in collaboration with clinicians, patients, and care partners across Ontario.

For more information, contact QualityStandards@OntarioHealth.ca.

Quality Statements to Improve Care: Summary

These quality statements describe what high-quality care looks like for people with osteoarthritis.

Quality Statement 1: Clinical Assessment for Diagnosis
People who have persistent, atraumatic, movement-related joint pain or aching, and/or morning stiffness lasting less than 30 minutes, are diagnosed with osteoarthritis based on clinical assessment. Radiological imaging is not required to make a diagnosis in people aged 40 years or older if their symptoms are typical of osteoarthritis.

Quality Statement 2: Comprehensive Assessment to Inform the Care Plan
People who have been diagnosed with osteoarthritis receive a comprehensive assessment of their needs to inform the development of their care plan.

Quality Statement 3: Patient Education
People with osteoarthritis are offered education to facilitate a self-management plan. This education is provided in accessible formats.

Quality Statement 4: Patient Self-Management Plan
People with osteoarthritis are supported to develop an individualized, goal-oriented self-management plan that evolves to address ongoing symptom management and access to resources and supports.

Quality Statement 5: Therapeutic Exercise
People with osteoarthritis are strongly encouraged to participate in progressive neuromuscular training, muscle strengthening, and aerobic exercise of sufficient frequency, intensity, and duration to maintain or improve joint health and physical fitness.

Quality Statement 6: Physical Activity
People with osteoarthritis are strongly encouraged to optimize their physical activity and minimize sedentary activity, and are offered information and support to help them toward these goals.

Quality Statement 7: Weight Management
People with osteoarthritis who are overweight or obese are offered patient-centred weight-management strategies, and people at a normal weight are encouraged to maintain their weight.

Quality Statement 8: Pharmacological Symptom Management
People with symptomatic osteoarthritis are offered pain-relieving medication options when nonpharmacological treatments are insufficient to control their symptoms.

Quality Statement 9: Referral to a Clinician With Additional Skills in Osteoarthritis Management
People with osteoarthritis, when clinically indicated, are referred by their primary care clinician to a clinician with additional skills in osteoarthritis management.

Quality Statement 10: Referral for Consideration of Joint Surgery

People with osteoarthritis whose symptoms are not sufficiently controlled through nonsurgical management and whose quality of life is negatively impacted by their joint-related symptoms should be referred for consideration of joint surgery.

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2024 Summary of Updates

In 2024, we completed an evidence review to capture new or updated clinical practice guidelines and health technology assessments published since the original release of this quality standard in 2018. This update aligns the quality standard with the most recent clinical evidence and current practice in Ontario.

Below is a summary of changes to the overall quality standard:

- Updated links, secondary references, and data sources where applicable
- Updated formatting to align with current Ontario Health design and branding
- Updated the scope of the quality standard to include people with osteoarthritis of the shoulder
- Revised the accompanying resources (i.e., patient guide, placemat, case for improvement slide deck, technical specifications) to reflect changes to the quality standard
- Updated data in the case for improvement slide deck, in the "Why This Quality Standard Is Needed" section and in quality statement rationales where applicable
- Removed language limiting some quality statements to hip and knee osteoarthritis to reflect guidance from updated evidence sources as well as the scope of the quality standard (which also includes hand and shoulder osteoarthritis), where appropriate
- Revised guiding principles section and added a guiding principle on integrated care

Below is a summary of changes to specific quality statements:

- Quality statement 1:
  - Modified the rationale to include data on people with osteoarthritis who do not understand their condition or know which type they have
- Quality statement 2:
  - Updated the definition of *comprehensive assessment of needs* to include waist circumference as a measure of the accumulation of weight in the abdomen, the social determinants of health, psychological status, access to technology and computer literacy as personal factors
  - Modified the rationale to include educational, behavioural, and psychosocial factors as components of the assessment and that the assessment should also be responsive to the person's capabilities

- Modified the For Clinicians audience statement to include key components of the comprehensive assessment of needs

- Quality statement 3:
  - Updated the definition of *education* by including audio and video as additional formats and that education should be easily accessible and ongoing. Limitation of medications has been included in addition to benefits and risks
  - Modified the rationale to include that information should be provided in an accessible format and account for individual needs such as language and culture
  - Modified the For Clinicians audience statement advising that ongoing education and educational resources should be provided in an accessible format

- Quality statement 4:
  - Updated the definition of *self-management plan* to include cognitive behavioural therapy as a nonpharmacological pain management option

- Quality statement 5:
  - Modified the rationale to include considerations for people with upper extremity osteoarthritis, that therapeutic exercise should be combined with a structured education program or behaviour change approaches in a comprehensive care plan, and that the aim of therapeutic exercise for people with osteoarthritis of the hip, knee, hand, and shoulder should be to improve functional movement and proprioceptive balance
  - Modified the For People With Osteoarthritis audience statement to include improving balance as a goal of therapeutic exercise
  - Modified the For Clinicians audience statement to include therapeutic exercise provided in combination with a structured education program

- Quality statement 7:
  - Updated the definitions of *overweight or obese* and *normal weight* to include waist circumference in addition to body mass index as a measure of accumulation of abdominal and body fat
  - Modified the rationale to include a higher pain experience for people who are overweight and obese, as well as the benefit of weight loss and exercise for reducing cumulative loading to the lower extremity joints and improving mobility

- Quality statement 8:
  - Updated the definition of *pain-relieving medication options* to include shoulder osteoarthritis
  - Updated the definition of *stepped approach* for bullets related to intra-articular corticosteroid injections and intra-articular hyaluronic acid injections
- Quality statement 9:
  - Modified the rationale by including a reference to Appendix 3, Guiding Principles, Integrated Care with respect to the referral process
- Quality statement 10:
  - Modified the rationale to mention that people with hand osteoarthritis should not be referred for osteotomy
  - Updated the rationale with new literature on appropriateness criteria for the decision to refer

A Note on Terminology

When we refer to "people with osteoarthritis" in this quality standard, we mean those with knee, hip, hand (i.e., thumb or fingers), or shoulder (i.e., the glenohumeral joint) osteoarthritis.

The term "symptoms" in this quality standard means any symptoms related to osteoarthritis. Typical symptoms include pain, aching, stiffness, swelling, functional limitations, disability, decreased physical activity, anxiety and mood disorders, fatigue, and poor sleep quality.

When we refer to "clinicians" in this quality standard, we mean the many types of people who may be part of the health care team. This includes, but is not limited to, the following regulated professionals: primary care clinicians (e.g., family physician nurse practitioner, chiropractor, dietitian, nurse, occupational therapist, pharmacist, or physiotherapist), focused-practice physician (e.g., pain management, sport and exercise medicine), specialist physician (e.g., orthopaedic surgeon, physiatrist, plastic surgeon, rheumatologist), advanced/extended practice physiotherapist or occupational therapist, psychologist, counsellor, or other clinician with additional skills in the management of osteoarthritis-related symptoms (e.g., pain, poor sleep quality, anxiety and mood disorders, weight management).

Why This Quality Standard Is Needed

Osteoarthritis, the most common type of arthritis, is a progressive condition that can affect any moveable joint of the body but most commonly the hips, knees, hands, and shoulders. Studies in various populations show that about 20% to 30% of adults have osteoarthritis in at least 1 of these joints.[1,2] The condition starts as a change to the biological processes within a joint, leading to structural changes such as cartilage breakdown, bone reshaping, bony lumps, joint inflammation, and loss of joint function. This often results in pain, stiffness, and loss of movement.[3] Osteoarthritis is characterized by fluctuating symptoms and increased intensity of joint pain over time. Certain factors make some people more vulnerable to developing osteoarthritis: genetic factors, being overweight or obese, injury from accidents or surgery, and heavy physical activity in some sports or at work.[3]

The prevalence of osteoarthritis among people aged 20 years and older in Ontario is approximately 14% and it is expected to increase as the population of older adults grows (Canadian Community Health Survey, 2021).[4] The condition is more common in women and in middle to older age, with the highest prevalence in Ontario (46.5%) among women aged 75 to 79.[4]

Osteoarthritis is associated with other chronic health conditions, such as depression, high blood pressure, cardiovascular disease, metabolic syndrome, and stroke.[5,6] People with osteoarthritis report a significantly lower quality of life than those without osteoarthritis, including 30% lower physical functioning, 18% lower social functioning, and 18 % lower general health. The condition accounted for 314 years of healthy life lost due to disability per 100,000 people in North America in 2020, a 4.9% increase from 1990.[7] The rising rates of osteoarthritis will have a substantial impact on the lives of people living with the condition and on their families, on costs to the health care system, and on the broader economy through lost productivity, people leaving the workforce, and long-term disability.[8,9]

Despite the known personal and societal burden of osteoarthritis, it is underdiagnosed and undertreated,[10-12] resulting in missed opportunities for people to benefit from high-quality care. While there is no cure for osteoarthritis, there are several ways to effectively manage symptoms through nonpharmacological and pharmacological treatments that can help reduce pain, improve function, maintain quality of life, and delay disability.[13] Early intervention is best.[13] Poorly managed osteoarthritis leads to avoidance of physical activity and exacerbation of pain. This in turn can lead to fatigue, disability, impaired activities of daily living and at work, and depressed mood,[14,15,16] and is linked with heart disease, diabetes, and obesity.[6,17,18] Further, difficulties encountered by people with osteoarthritis in accessing timely health care such as surgical treatment, exercise, and recreational programs were exacerbated during the COVID-19 pandemic, negatively affecting their health outcomes, health behaviours, and quality of life.[19,20] Specifically, people with osteoarthritis experienced higher rates of depression, significant injury, and employment disruptions such as stopping or changing jobs or having a major change in work activities.[20]

Substantial gaps in the quality of osteoarthritis care exist all along the care pathway. Many people delay seeking care: in a Canadian study, about 40% of patients with osteoarthritis had symptoms for more than a year before they were diagnosed, and the average time elapsed was more than 7 years.[21] About 45% of primary care clinicians caring for people with osteoarthritis in Australia, New Zealand,

and Canada have identified difficulty in interpreting clinical practice guidelines (knowledge to practice) as a barrier to providing high-quality care.[22] Similarly, physiotherapists and other primary care clinicians identified being limited by the lack of an interprofessional team, time, space, equipment, and other resources (e.g., written information and administrative support) needed within the workplace to provide nonpharmacological and nonsurgical care to people with osteoarthritis.

First-line treatment for osteoarthritis should include nonpharmacological approaches: education, therapeutic exercise, daily physical activity, weight loss (if appropriate), and self-management support.[23] These treatments are underused. A study in Alberta found that, between 2014 and 2016, only 60% of patients recommended for total knee replacement ever received nonsurgical treatments (physiotherapy, therapeutic exercise, or weight management) or pharmacological treatment as part of their management plan. The use of these approaches differed across the patients' gender, age, level of social support, and education.[24] A survey of Canadians diagnosed with osteoarthritis shows relatively few are seeking advice from clinicians who can provide effective nonpharmacological management. Only 22% had consulted a physiotherapist or occupational therapist in the previous year, and 12% had attended an educational class to help them manage arthritis-related problems.[21]

These shortfalls in access to needed care could be influenced by a misconception among clinicians and patients that osteoarthritis symptoms are a normal part of aging with limited treatment options. The cost of services and/or a lack of extended health insurance coverage also play a role. Most community-based services for osteoarthritis (such as physiotherapy, occupational therapy, weight-management programs) are not widely available, at least not without substantial costs to patients that must be borne out-of-pocket or with private insurance.[25,26]

In contrast, most people with osteoarthritis use some form of pharmacological treatment. For example, in a 2015 study of primary care in Canada, data from electronic medical records showed that 57% of patients with osteoarthritis had a prescription for a nonsteroidal anti-inflammatory drug, and about 33% were prescribed an opioid for pain management.[27]Similarly, in another national study, 66% of people with osteoarthritis (any joint) self-reported using nonprescription medications. Among those with hip and/or knee osteoarthritis, the figure was 74%.[21] While the effectiveness of pharmacological treatment, including over-the-counter medications, for managing osteoarthritis has been established, the limited capture of medication use patterns contributes to gaps in the understanding of osteoarthritis pharmacological management.

For a small percentage of people, their condition will deteriorate to the extent that surgical options such as joint replacement, joint fusion, or joint-conserving surgery may be necessary. However, for people in Ontario who require surgical intervention, over 30% were unable to receive a knee or hip replacement surgery within the recommended 6 months in 2022.[28] Surgical treatment should be offered to people with moderate to severe joint damage that causes unacceptable pain or limitation of function despite the use of interventions described in this quality standard.[9]

Measurement to Support Improvement

The Osteoarthritis Quality Standard Advisory Committee identified 5 overarching indicators to monitor the progress being made toward improving care for people with osteoarthritis in Ontario. The committee did not identify any provincially measurable indicators because provincial data sources on care for osteoarthritis are limited, as is the ability to identify people with osteoarthritis. When data sources or methods are developed to accurately identify people with osteoarthritis, the committee will reconsider provincial measures of success for this quality standard.

Indicators That Can Be Measured Using Only Local Data

- Percentage of people with osteoarthritis who report the long-term control of their pain as acceptable
- Percentage of people with osteoarthritis who report a high level of success in coping with and self-managing their condition
- Percentage of people with osteoarthritis who have timely access to appropriate rehabilitation management strategies (such as education, exercise, and weight management)
- Median wait time to first appointment with a clinician with additional skills in osteoarthritis management (i.e., additional skills in rheumatology, orthopaedic surgery, sport and exercise medicine, or pain management)
- Percentage of people with osteoarthritis referred to a clinician with additional skills in osteoarthritis management (i.e., additional skills in rheumatology, orthopaedic surgery, sport and exercise medicine, or pain management) who have their first appointment in a timely manner

Note: The target time frame to see a clinician with additional skills in osteoarthritis management will vary depending on the type of clinician and the clinical characteristics of the patient.

To assess the equitable delivery of care, the quality standard indicators can be stratified by the socioeconomic and demographic characteristics of the person with osteoarthritis, such as age, income, region or geography, education, language, race and ethnicity, gender, and sex.

Quality Statement 1: Clinical Assessment for Diagnosis

> People who have persistent, atraumatic, movement-related joint pain or aching, and/or morning stiffness lasting less than 30 minutes, are diagnosed with osteoarthritis based on clinical assessment. Radiological imaging is not required to make a diagnosis in people aged 40 years or older if their symptoms are typical of osteoarthritis.
>
> Sources: European League Against Rheumatism, 2017[29] | Department of Veterans Affairs and Department of Defense, 2020[30] | National Institute for Health and Care Excellence, 2022[23]

Definitions

Symptoms typical of osteoarthritis: Persistent atraumatic movement-related joint pain, aching, stiffness, and/or swelling. Morning stiffness lasting less than 30 minutes may or may not be present. Symptoms may affect one or a few joints.[23,29]

Atypical features: A recent history of injury, joint locking, prolonged morning joint-related stiffness, rapid onset of symptoms, the presence of a hot swollen joint, fever, chills, sweats, or feeling generally unwell. Atypical features usually indicate the need for further investigations to identify possible additional or alternative diagnoses, including loose body, meniscal injury, gout, or other inflammatory arthritides, such as rheumatoid arthritis, septic arthritis, and malignancy (if bone or soft tissue pain are present).[31]

Rationale

People with osteoarthritis often do not understand their condition and close to 50% of people with arthritis do not know which type they have.[32] For people aged 40 years or older who present with symptoms typical of osteoarthritis, a diagnosis of osteoarthritis can be made based on clinical assessment (history and physical examination). Diagnosis does not require radiological imaging (e.g., x-ray, magnetic resonance imaging [MRI]) or laboratory investigations (e.g., blood work).[29]

Clinical assessment is the most accurate way to diagnose osteoarthritis because symptoms do not always match visible findings on x-ray or MRI. Some people present with severe pain and show minimal changes on imaging, while others have minimal symptoms despite moderate to severe structural joint changes. In addition, the visible bony changes on x-ray are a relatively late feature in

the progression of the condition. Changes seen on x-ray do not require treatment if the person does not have symptoms.

Osteoarthritis may be diagnosed in people under the age of 40 when other factors such as prior injury (in the past decade or remote past) or congenital deformities such as hip dysplasia are present along with typical osteoarthritis symptoms.

For adults who present with atypical features of osteoarthritis or where an alternative diagnosis is being considered, it may be necessary to perform other investigations. Referral to a clinician with additional skills in osteoarthritis management may be considered to assist in making a diagnosis (see Quality Statement 9: Referral to a Clinician with Additional Skills in Osteoarthritis Management).[33]

What This Quality Statement Means

For People With Osteoarthritis

You should see a clinician if you have persistent pain, aching, and/or stiffness in your knee, hip, hand, or shoulder when you move it. This does not apply if you have had a recent injury involving that joint or the area around it.

Getting a diagnosis early is important so that you can manage symptoms and maintain your quality of life. The symptoms of osteoarthritis tend to get worse with time, so it's best to start therapies early.

To diagnose your condition, your clinician will examine you and ask about your symptoms. You will not need an x-ray or a magnetic resonance imaging (MRI) scan to make a diagnosis if you are 40 or older and have symptoms typical of osteoarthritis. This is because osteoarthritis is more common in this age group, and an x-ray or MRI will not explain your symptoms or help in making a diagnosis. Initial decisions about your treatment can usually be based on the examination and how your symptoms are affecting your life.

For Clinicians

Diagnose osteoarthritis in adults based on clinical assessment if the person has symptoms typical of osteoarthritis.[29] Radiological imaging is not needed to make a diagnosis for people aged 40 years or older who present with symptoms typical of osteoarthritis. For those who present with atypical features of osteoarthritis or where an alternative diagnosis is being considered, it is usually necessary to perform other investigations (e.g., imaging and/or blood work) or refer to a clinician with additional skills in osteoarthritis management to assist in making a diagnosis (see Quality Statement 9: Referral to a Clinician with Additional Skills in Osteoarthritis Management).

For Organizations and Health Services Planners

Ensure clinicians have clear policies and processes in place for making a diagnosis based on clinical assessment for people with symptoms typical of osteoarthritis (without radiological imaging). Service providers should also monitor the use of imaging for diagnosing osteoarthritis in adults to ensure that it is not being used inappropriately.

Quality Indicator: How to Measure Improvement for This Statement

- Percentage of people aged 40 and older with symptoms typical of osteoarthritis who undergo an x-ray or MRI to make a diagnosis (a lower percentage is better)

Measurement details for this indicator, as well as overarching indicators to measure improvement for the goals of the entire quality standard, are available in the technical specifications.

Quality Statement 2: Comprehensive Assessment to Inform the Care Plan

People who have been diagnosed with osteoarthritis receive a comprehensive assessment of their needs to inform the development of their care plan.

Sources: American College of Rheumatology, 2019[34] | Department of Veterans Affairs, Department of Defense, 2020[30] | European League Against Rheumatism, 2023[35] | European League Against Rheumatism, 2018[36] | National Institute for Health and Care Excellence, 2022[23]

Definition

Comprehensive assessment of needs: In partnership with the patient and their health care team, and using a collaborative, coordinated, and consistent approach to shared decision-making (see Appendix 3, Guiding Principles, Integrated Care), a comprehensive assessment of needs should be initiated within 3 months of diagnosis and reviewed at every clinical encounter, or if a new symptom or goal of care is identified. This assessment should take into account that osteoarthritis may exist within a broader context, with patients typically having other medical conditions. The assessment can be offered in-office or virtually (if appropriate). It should be adapted to meet individual needs, preferences, and capabilities and address the following domains[35-37]:

- Body functions and structures: such as pain, stiffness, quality of sleep, mood, joint range of motion, sexual function, weight (waist circumference or body mass index [BMI]), other coexisting health conditions
- Activities: such as activities of daily living (e.g., personal care, walking ability); instrumental activities of daily living (e.g., housework, preparing meals, shopping, managing medications)
- Participation: such as family duties, leisure activities, exercise, employment
- Personal factors: such as use of assistive devices (e.g., cane, splints, braces), avoidance of activity, attitudes toward exercise, health beliefs, social determinants of health (e.g., socioeconomic status), psychological status, access to technology, computer literacy, culture
- Environmental factors: such as support network, job setting (e.g., flexibility of work hours), local availability of resources for osteoarthritis care

Rationale

A comprehensive assessment of needs goes beyond the clinical examination and considers the whole person. The assessment should take into account educational, behavioural, psychosocial, and physical factors that impact quality of life, the ability to carry out activities of daily living, and participation in work, family commitments, and leisure activities.[23]

People living with osteoarthritis experience a complex cycle of challenges because of their symptoms. Joint pain can cause interrupted sleep, fatigue, functional limitations, and disability, which often lead to mood changes, worsening pain, avoidance of activity, and—consequently—exacerbated symptoms and even greater disability.[14] Obesity and coexisting chronic conditions, both more likely in people with osteoarthritis, will impact their symptoms and overall management of their condition.[38] The comprehensive assessment should address the individual's medical needs (including waist circumference or BMI, and coexisting health conditions), as well as their social and emotional needs. This assessment should inform the development of a care plan that is patient-centred and responsive to the person's needs, preferences, and goals.

What This Quality Statement Means

For People With Osteoarthritis

Your clinicians should do a comprehensive assessment that covers your overall health. They should talk with you about how your osteoarthritis affects your energy, mood, sleep, work, hobbies, family, and social life.

They should use this information to develop a care plan with you that is started within 3 months of your diagnosis. Your care plan should outline how you and your clinicians will work together to improve your symptoms and your ability to keep doing your usual activities. Together, you should review this plan at every visit and change it as needed.

For Clinicians

Perform and document a comprehensive assessment for people with osteoarthritis using a collaborative, coordinated, and consistent approach to shared decision-making. This assessment should be initiated within 3 months of diagnosis and address body functions and structures, activities of daily living, and participation in social activities, as well as personal and environmental factors. Review the assessment whenever the patient visits you or identifies a new symptom or goal for their care plan.

For Organizations and Health Services Planners

Ensure all health care settings have assessment tools, systems, processes, and resources in place for adults with osteoarthritis to have comprehensive assessments of their needs initiated within 3 months of their diagnosis and on an ongoing basis to inform their care plan.

Quality Indicators: How to Measure Improvement for This Statement

- Percentage of people diagnosed with osteoarthritis who have a comprehensive assessment of their needs and development of a care plan initiated within 3 months of their diagnosis
- Percentage of people with osteoarthritis who identify a significant change in their monitored symptom(s), or a new symptom or a new goal for their care plan, and who review their comprehensive assessment of needs and their care plan with their clinician

Measurement details for these indicators, as well as overarching indicators to measure improvement for the goals of the entire quality standard, are available in the technical specifications.

Quality Statement 3: Patient Education

> People with osteoarthritis are offered education to facilitate a self-management plan. This education is provided in accessible formats.
>
> Sources: American Academy of Orthopaedic Surgeons, 2021[39] | American College of Rheumatology, 2019[34] | European League Against Rheumatism, 2023[35] | European League Against Rheumatism, 2018[36] | National Institute for Health and Care Excellence, 2022[23]

Definition

Education: Patient education should be offered in verbal, written, audio, video, and/or electronic (e.g., e-learning, website) formats. Education should be provided in an accessible format that accounts for the patients' access to technology and their computer literacy. Education should be ongoing and individualized and may include the following types of information:

- Overview of the condition (e.g., nature of osteoarthritis), its causes (especially those pertaining to the person), its consequences (e.g., relationship between pain and sleep, pain and function, emotional impact of pain), and prognosis
- Addressing common myths (e.g., using affected joints will damage or harm the joints)
- Living with and managing osteoarthritis (see quality statement 4: Patient Self-Management Plan)
- Importance of an active lifestyle (see quality statement 5: Therapeutic Exercise and quality statement 6: Physical Activity), healthy eating (see quality statement 7: Weight Management), management of sleep interruptions
- Difference between therapeutic exercise and physical activity, and the need for both
- How to protect joints and prevent injury
- Value of trying nonpharmacological treatments before starting medication (see Definitions in quality statement 8: Pharmacological Symptom Management)
- Benefits, risks, and limitations of medications (see quality statement 8: Pharmacological Symptom Management)
- Advice and training on aids and devices (e.g., footwear, orthotics, bracing, joint supports/splints, canes) and ergonomic principles to enhance daily functioning and participation in social and work roles
- Local application of heat or cold as an adjunct to other treatments
- Relationship between weight and osteoarthritis symptoms (see quality statement 7: Weight Management)

- How to adapt when sexual function is affected by osteoarthritis symptoms
- When referrals may be needed for additional assessment or treatment (see quality statement 9: Referral to a Clinician With Additional Skills in Osteoarthritis Management and quality statement 10: Referral for Consideration of Joint Surgery)
- Information about support groups and patient organizations
- Encouragement to seek information about relevant clinical trials

Rationale

The goal of patient education is to improve self-confidence in one's ability to manage a condition and its health outcomes.[23] Patient education for people with osteoarthritis supports understanding of the condition and encourages positive changes in attitudes, health behaviours, and beliefs about pain, physical activity, and joint damage. This education should include specific information, such as the importance of weight management and the benefits of physical activity, to enable positive health-seeking behaviours.

Patients should receive this information soon after their diagnosis and on an ongoing basis to address changes in their symptoms or functional abilities. Education may be provided in different formats, including tailored one-to-one sessions, group education programs in the clinical setting, or referral to community-based education programs. Not every topic noted in the Definitions section of this statement will be relevant for everyone with osteoarthritis, and there may be other areas that warrant consideration for particular individuals.

The sharing of information is an integral part of osteoarthritis management and should include family and care partners, if appropriate. The information provided should be based on the individual needs of the person with osteoarthritis (e.g., their language and culture), their perception of their condition, their learning abilities, and their readiness to change.

What This Quality Statement Means

For People With Osteoarthritis

Your clinicians should help you learn about your osteoarthritis and how to manage it. They may provide this information directly or refer you to education programs in your community. They should provide this information when you are first diagnosed and again as your needs change.

Each person will need different types of information, but there are key things everyone with osteoarthritis needs to know:

- Your clinicians should talk with you about the importance of being physically active, doing specific exercises, and managing your weight. These things can help reduce your pain, improve other symptoms (such as poor sleep and mood changes), and maintain your ability to function

- Your clinicians should show you how to protect your joints and prevent injury while being physically active (for example, by taking short breaks to allow the joint to rest)

For Clinicians

Provide ongoing education and educational resources (or refer to community-based education programs) in response to the needs of people with osteoarthritis to enhance their understanding of the condition and its management. Information should be provided in an accessible format and include all aspects of management and be reinforced and expanded upon at subsequent visits. Share information with family and care partners, if appropriate.

For Organizations and Health Services Planners

Ensure all health care settings have patient education available for adults with osteoarthritis that includes accessible information sessions and materials in written and electronic formats. The format of sessions and materials should be based on the specific needs of the local population.

Quality Indicators: How to Measure Improvement for This Statement

- Percentage of people with osteoarthritis who receive education in an accessible format on osteoarthritis and its management
- Percentage of people with osteoarthritis who report a high level of success in coping with and self-managing their condition

Measurement details for these indicators, as well as overarching indicators to measure improvement for the goals of the entire quality standard, are available in the technical specifications.

Quality Statement 4: Patient Self-Management Plan

People with osteoarthritis are supported to develop an individualized, goal-oriented self-management plan that evolves to address ongoing symptom management and access to resources and supports.

Sources: American Academy of Orthopaedic Surgeons, 2021[39] | American College of Rheumatology, 2019[34] | Department of Veterans affairs, Department of Defense, 2020[30] | National Institute for Health and Care Excellence, 2022[23] | Osteoarthritis Research Society International, 2019[40]

Definition

Self-management plan: The plan should be a written and/or electronic document that addresses both physical and psychosocial health needs. It may include[31]:

- A record of the mutually agreed-upon approach to self-managing osteoarthritis, while taking into account other chronic conditions
- Individualized goals
- Information about the condition and the chosen treatments, how to find support groups and online information, and details of self-management programs available locally
- A plan to access advice and support for:
  - Managing the emotional aspects of osteoarthritis and its impact on mental health and relationships
  - Engaging in therapeutic exercise to increase physical activity, including pacing strategies, and information about local services such as physiotherapy or chiropractic care, exercise classes, groups, and facilities
  - Weight management, for people who are overweight or obese, including referral to a dietitian or other local resources
  - Appropriate types and uses of aids and devices and referral to local services such as a chiropractor, occupational therapist, orthotist, pedorthist, podiatrist, or physiotherapist; these professionals can offer advice on suitable footwear, orthotic devices (such as insoles and braces, support/protection for thumb carpometacarpal joint) and assistive devices (such as walking sticks and tap turners)

  - Nonpharmacological pain management (such as heat or cold therapy, therapeutic exercise, cognitive behavioural therapy [as appropriate], and use of aids and devices)
  - Pharmacological pain management, including who can provide support (e.g., community pharmacies)

- Strategies for the patient to monitor themself, using simple measures to see how they are responding to management
- A plan to review the patient's osteoarthritis symptoms and adjust the self-management plan as their condition and needs change
- Contact information for the clinician who will monitor and follow up

Rationale

Self-management is a problem-based approach designed to help people gain self-confidence in their ability to develop skills to better manage their osteoarthritis (including their symptoms) and other health conditions.[41,42] Supporting people in self-management empowers them to take an active role in understanding their condition and how best to manage it, enabling them to identify their own priorities and goals for managing their health.[23] Self-management plans can be developed through individual programs or in groups, which include the benefit of peer support and opportunities for interaction. It may also be important to involve a family member or care partner, especially for people who have multiple chronic conditions.

In developing and working with a self-management plan, people identify challenges associated with their osteoarthritis and other health conditions, set goals, create action plans, problem-solve to understand the strategies they can use to overcome barriers, and monitor their progress in meeting their goals.[43] Clinicians have an important role in supporting patients to develop an individualized, goal-oriented self-management plan and reviewing it with them on an ongoing basis.

What This Quality Statement Means

For People With Osteoarthritis

Your clinicians should work with you to create a self-management plan. This is the part of your care plan that focuses on your role in your care. Your self-management plan is where you can set goals for living with osteoarthritis, create action plans, solve problems that arise, and chart your progress. Your plan should include information about how to access local services, such as exercise classes, weight-management programs, and support groups. Your plan will also need to consider any other medical conditions you have that may impact your goals and abilities.

Depending on your needs, your plan might also include information about aids and devices such as suitable shoes, leg braces, orthotics, and hand grips. These things can help you stay active and function well.

For Clinicians

Work with people with osteoarthritis to support the development of an individualized, goal-oriented self-management plan that gives the person information and advice on the ongoing management of their symptoms and directs them to resources and other supports they may need. This may include referring them to other clinicians (see quality statement 9: Referral to a Clinician With Additional Skills in Osteoarthritis Management), services, and community resources.

For Organizations and Health Services Planners

Ensure all health care settings have systems and processes in place for people with osteoarthritis to participate in developing an individualized, goal-oriented self-management plan that addresses the ongoing management of their symptoms and how to access resources and supports when needed.

Quality Indicators: How to Measure Improvement for This Statement

- Percentage of people with osteoarthritis who have a documented self-management plan
- Percentage of people with osteoarthritis who identify a significant change in their monitored symptoms(s), or a new symptom or goal for their care plan, and who review their self-management plan with their clinician

Measurement details for these indicators, as well as overarching indicators to measure improvement for the goals of the entire quality standard, are available in the technical specifications.

Quality Statement 5: Therapeutic Exercise

People with osteoarthritis are strongly encouraged to participate in progressive neuromuscular training, muscle strengthening, and aerobic exercise of sufficient frequency, intensity, and duration to maintain or improve joint health and physical fitness.

Sources: American Academy of Orthopaedic Surgeons, 2020[44] | American Academy of Orthopaedic Surgeons, 2021[39] | American Academy of Orthopaedic Surgeons, 2023[45] | American College of Rheumatology, 2019[34] | Department of Veterans Affairs, Department of Defense, 2020[30] | European League Against Rheumatism, 2023[35] | Health Quality Ontario, 2018[46] |National Institute for Health and Care Excellence, 2022[23] | Osteoarthritis Research Society International, 2019[40] | Ottawa Panel, 2018[47]

Definitions

Neuromuscular training: The aim of this training is to improve controlled movement through coordinated muscle activity (sensorimotor control) and the ability of the joint to remain stable during physical activity (functional stability).[48,49] Components include strength, balance, agility, and neuromuscular control to optimize movement patterns and reduce abnormal joint loads.[13,50,51]

Muscle strengthening: This involves exercise to strengthen the muscles around the affected joint to maintain functional independence, enhance balance, and reduce risk of falls.[31] This can include non–weight-bearing exercises to train isolated muscles selectively, and also weight-bearing exercises involving multiple joints.[48] The quality of strengthening exercises is emphasized by ensuring the level of training matches the person's abilities and that progression is encouraged.

Aerobic exercise: Also known as cardio, aerobic exercise can be low, moderate, or high intensity and involves using large muscles for sustained periods. Cycling, swimming laps, and walking in a pool or in a walking program are examples of aerobic exercise.[52] It is linked with improved physical and mental health as well as increased endurance or energy to participate in everyday activities.

Rationale

Currently, the most effective nonsurgical treatment for osteoarthritis is therapeutic exercise and other physical activity. Therapeutic exercise, a subset of physical activity, is planned, structured, and repetitive and has the objective of improving or maintaining physical fitness.[53] People with osteoarthritis of the hip and knee commonly experience physical deconditioning, lower extremity muscle weakness, functional instability, and poor neuromuscular function that can improve with exercise.[48,54-57] People with upper extremity osteoarthritis commonly experience a decreased quality

of life due to muscle weakness impacting hand function and reduction in mobility and dexterity. Therapeutic exercise has been shown to reduce pain, disability, and medication use, and to improve physical function, sleep, and mood in people with osteoarthritis.[23] Therapeutic exercise programs that include progressive neuromuscular training, muscle strengthening, and aerobic exercise can restore strength, balance, and healthy movement patterns and will not cause additional joint damage.[13,58]

Therapeutic exercise programs should be developed by a clinician with expertise in the prescription of exercise. They should be combined with a structured education program (see quality statement 3) or behaviour change approaches in a comprehensive care plan (see quality statement 2).[23,46] The therapeutic exercise program should be progressive, with a plan to gradually increase frequency, intensity, and duration sufficient to create physiological changes, and designed to optimize function.[58] Therapeutic exercises for osteoarthritis of the hip, knee, hand, and shoulder should target joint mobility and stability, muscle power and endurance for quality functional movement, and proprioceptive balance. The exercises need to be tailored to the specific muscular and functional deficits of each individual based on findings from clinical assessment. However, the therapeutic exercise program can be done in a group setting, which provides additional motivation for patients to learn about their condition and progressively increase their exercises.

What This Quality Statement Means

For People With Osteoarthritis

If you have osteoarthritis, doing specific types of exercises can reduce your pain and improve your balance and ability to move. Your clinicians should provide you with a therapeutic exercise program designed for your needs.

Therapeutic exercise is a planned program of exercises to strengthen your muscles and train them to move in ways that reduce the load on your joints. If you have hip or knee osteoarthritis, your exercise program should target the muscles in your legs, abdomen, and back. It should also include exercises to improve your heart and lung fitness. This will give you more energy to do your activities.

To make sure you benefit from these exercises, your clinicians should show you how to do them properly and safely. They should show you how to gradually do more challenging exercises and to increase the amount you can do.

For Clinicians

Provide people with osteoarthritis with progressive neuromuscular training, muscle strengthening, and aerobic exercise of sufficient frequency, intensity, and duration to maintain or improve joint health and physical fitness. This may include referral to a supervised individual or group education and therapeutic exercise program. The program should address the person's individual needs, circumstances, and self-motivation as identified in the clinical assessment. The program needs to be individually progressed; however, it can be provided in a group setting, depending on availability of local programs or facilities, in combination with a structured education program (see quality statement 3: Patient Education).

For Organizations and Health Services Planners

Ensure all health care settings have systems, processes, and resources in place for adults with osteoarthritis to receive progressive neuromuscular training, muscle strengthening, and aerobic exercise of sufficient frequency and intensity to maintain or improve joint health and physical fitness. For more information, please see GLAD:D Canada, as well as the associated health technology assessment recommending public funding of a structured education and neuromuscular exercise program for the management of people with osteoarthritis of the hip or knee.

Quality Indicators: How to Measure Improvement for This Statement

- Percentage of people with osteoarthritis who participate in progressive neuromuscular training, muscle strengthening, and aerobic exercise programs
- Local availability of therapeutic exercise programs delivered by clinicians with expertise in the prescription of exercise

Measurement details for these indicators, as well as overarching indicators to measure improvement for the goals of the entire quality standard, are available in the technical specifications.

Quality Statement 6: Physical Activity

People with osteoarthritis are strongly encouraged to optimize their physical activity and minimize sedentary activity, and are offered information and support to help them toward these goals.

Sources: American Academy of Orthopaedic Surgeons, 2021[39] | American College of Rheumatology, 2019[34] | Department of Veterans Affairs, Department of Defense, 2020[30] | European League Against Rheumatism, 2023[35] | National Institute for Health and Care Excellence, 2022[23] | Osteoarthritis Research Society International, 2019[40]

Definition

Information and support: Components may include:

- Understanding that joint pain from physical activity does not equal harm, and that there is greater health risk and increased risk of joint pain by not being active
- Understanding that physical activity will likely increase pain a little to moderately and that thermal modalities (heat or cold) or medication after activity can be used to manage this pain
- Pacing activity so it is interspersed with short periods of rest
- Developing an individualized physical activity plan, based on the person's needs and preferences, with realistic and gradually increasing targets (e.g., bouts of 10 minutes of walking to reach 5,000 steps per day, gradually increased to 30-minute bouts for 10,000 steps per day)
- Iterative problem-solving that emphasizes skills to improve adherence and reinforce maintenance (e.g., activity trackers or other mobile e-tools to measure steps taken, motivational programs, logbooks, written information or electronic resources, booster sessions)
- Choosing activities the person likes, such as[33]:
  - Cardiovascular and/or resistance exercise on land (e.g., walking, biking)
  - Activities requiring neuromuscular control, modified as needed (e.g., yoga, Tai Chi)
  - Aquatic exercise (e.g., swimming, aqua-fit, walking in a pool)
- Helping those who are sedentary make a plan to get started; if pain is a barrier to physical activity, this may include providing pain-relieving medication (see quality statement 8: Pharmacological Symptom Management)

Rationale

Physical activity is any activity that involves bodily movement, done as part of leisure, recreation, work, active transportation, or household tasks.[53,59] It is different from therapeutic exercise, which is a type of physical activity that is planned, structured, repetitive, and aims to improve or maintain one or more components of physical fitness[60] (see quality statement 5: Therapeutic Exercise). Regular physical activity will not damage joints and can reduce the symptoms of osteoarthritis and improve overall health.[23,35,40]

A sedentary lifestyle is a known risk factor for osteoarthritis and for worsening of symptoms, and can be modified by increasing physical activity and exercise.[61,62] People with osteoarthritis who are sedentary are also vulnerable to further losses in quality of life if they become increasingly sedentary.[62,63] They may need education from a clinician that includes information and support in developing a plan to get started, including how to incorporate physical activity into their daily lives and guidance on managing symptoms, such as doing physical activity within acceptable pain levels rather than avoiding pain.[64-66]

Regular physical activity is recommended, as much as the person is able to do and can tolerate, with a target to accumulate at least 150 minutes of moderate to vigorous aerobic activity per week, in bouts of 10 minutes or more.[64-66] Moderate activity will cause adults to sweat a little and breathe harder; examples are brisk walking, biking, household chores, dancing, and yard work. Vigorous activity will cause adults to sweat and be out of breath; examples are faster-paced walking, biking uphill, and swimming laps.

For those who cannot meet the recommended target, a small amount of physical activity is better than none. Quality-of-life gains can be achieved by replacing sedentary time (sitting, lying down) with either daily intervals of 10 minutes of moderate to vigorous physical activity or 1 hour of light physical activity, such as walking slowly, making a bed, and preparing food.[62] If physical activity does not aggravate joint pain or swelling, it is safe to engage in it beyond these amounts.[64-66]

What This Quality Statement Means

For People With Osteoarthritis

In addition to your therapeutic exercise program, your clinicians should encourage you to be physically active every day. Even a small amount of activity is good. Regular physical activity can greatly reduce the pain, aching, and stiffness related to your osteoarthritis and improve your overall health.

Walking, biking, swimming, rowing, aqua-fit, and walking in a pool are activities that are gentler on the joints. Yoga and Tai Chi are also good but may need to be modified for you.

Brisk walking, biking, household chores, dancing, and yard work are examples of moderate activity.

Examples of vigorous activity are faster-paced walking, biking uphill, and swimming laps. If you feel pain when you are active, it does not mean you are damaging your joints. If an activity does make

your symptoms worse, your clinicians should show you how to modify it, or recommend other activities.

You should aim to do as much physical activity as you can tolerate. A good target is at least 150 minutes of moderate to vigorous activity each week. Being active in bouts of 10 minutes or more will give you health benefits. If you find the target of 150 minutes each week is too hard, you can start small and gradually increase the amount of physical activity you do each day.

Your clinicians should work with you on a plan to reach your goals, or refer you to community programs that can help.

For Clinicians

Encourage people with osteoarthritis to optimize their physical activity and minimize sedentary activity. Explain the importance of being physically active every day, both for their osteoarthritis and their overall health. Provide information about strategies and resources to help them develop an individualized physical activity plan that is responsive to their needs and preferences. If needed, refer patients to other clinicians (e.g., chiropractors, physiotherapists, sport and exercise medicine physicians), or community programs that provide education and peer support and facilitate ongoing participation in daily physical activity for people with osteoarthritis.

For Organizations and Health Services Planners

Ensure all health care settings have systems, processes, and resources in place for adults with osteoarthritis to receive information and support about how to optimize their physical activity and minimize sedentary activity. Ensure all health care settings have systems and processes in place for people with osteoarthritis to participate in developing an individualized physical activity plan. Ensure that appropriate local programs are available to support a physically active lifestyle, including referral to community-based fitness programs and facilities that offer walking, aquatic, yoga, or Tai Chi activities.

Quality Indicators: How to Measure Improvement for This Statement

- Percentage of people with osteoarthritis who receive information and support to participate in daily physical activity from a clinician
- Percentage of people with osteoarthritis who complete a weekly minimum of 150 minutes of moderate to vigorous physical activity
- Local availability of programs to support a physically active lifestyle, including community-based fitness programs and facilities

Measurement details for these indicators, as well as overarching indicators to measure improvement for the goals of the entire quality standard, are available in the technical specifications.

Quality Statement 7: Weight Management

People with osteoarthritis who are overweight or obese are offered patient-centred weight-management strategies, and people at a normal weight are encouraged to maintain their weight.

Sources: American Academy of Orthopaedic Surgeons, 2021[39] | American College of Rheumatology, 2019[34] | Department of Veterans, Affairs Department of Defense, 2020[30] | European League Against Rheumatism, 2023[35] | National Institute for Health and Care Excellence, 2022[23] | Osteoarthritis Research Society International, 2019[40]

Definitions

Overweight or obese: The accumulation of abdominal and body fat is measured by waist circumference and body mass index (BMI). Waist circumference is measured at the part of the torso located midway between the lowest rib and the iliac crest (top of pelvic bone).[67] Waist circumference categories are: small circumference (men: ≤ 93.9 cm; women: ≤ 79.9 cm), medium circumference (men: ≥ 94 cm and < 101.9 cm; women: ≥ 80 cm and < 87.9 cm), and large circumference (men: ≥ 102 cm; women: ≥ 88 cm).[68]

Body mass index is calculated as weight in kilograms divided by height in metres squared. Though it is not a direct measure of body fat, it is the most widely investigated and most useful indicator of weight-related health risk. Internationally accepted BMI values for overweight adults are 25.0 to 29.9 kg/m^2; for obese adults, 30.0 to 39.9 kg/m^2; and for severely obese adults, 40.0 kg/m^2 or higher.[67] Body Mass Index should not be the sole factor in determining the need for care or the level of care provided to maintain a healthy body weight.

Normal weight: Waist circumference values for men and women of normal weight are < 102 cm and < 88 cm, respectively, and BMI values for adults of normal weight are 18.5 to 24.9 kg/m.[67]

Weight-management strategies: Strategies to help people with osteoarthritis lose weight should include a focus on lifestyle interventions and behaviour-change strategies to encourage healthy eating and increased physical activity. The amount of support should be determined by the person's needs and be responsive to changes over time. Weight-management programs should be delivered by trained professionals (e.g., dietitians) and ideally use an interprofessional approach. Practical, patient-centred weight-management strategies may include the following[35]:

- Regular self-monitoring, such as food diaries, calorie-counting apps, and recording weight monthly
- Regular support meetings to review/discuss progress

- Understanding how food intake and exercise work together to affect weight
- Education on healthy eating
- Understanding eating behaviours, triggers such as stress, and alternative coping strategies
- Timing of eating and exercise
- Appropriate sleep hygiene
- Maintaining good mental health
- Nutrition education
- Predicting and managing relapse

Rationale

Being overweight or obese is a known risk factor for the development and progression of osteoarthritis and higher pain experience. The contributing stresses on the body are complex and include both biomechanical factors (e.g., increased or abnormal joint loading in the lower extremities, loss of muscle mass and strength over time, mechanical stress leading to release of inflammatory mediators from joint tissues) and nonmechanical factors (e.g., inflammatory mediators produced in fat tissue).[69]

A combination of weight loss and exercise is the most beneficial approach to managing osteoarthritis and may help reduce cumulative loading to the lower extremity joints.[30,69,70] People who are overweight or obese should be offered weight-management strategies or referred to community programs to help them lose a minimum of 5% of body weight for some symptom relief[30,40] and ideally 10% or more for significant improvements in symptoms, physical function, mobility, and health-related quality of life.[30,69] Medications and surgery may also be options for people with severe obesity.[31]

What This Quality Statement Means

For People With Osteoarthritis

Being overweight can make joint pain and mobility worse. Losing weight can improve your symptoms. If you have osteoarthritis and are overweight, your clinicians should offer you help to lose at least 5% to 10% of your body weight. If you are at a healthy weight, they should encourage you to maintain it.

If you need help, your primary care clinician should refer you to a weight-management program or dietitian. They can support you with information and advice on things like how eating and exercise work together to affect your weight and how to stay motivated and reach your weight-loss goals.

For Clinicians

Offer weight-management strategies to adults with osteoarthritis who are overweight or obese to help them lose a minimum of 5% to 10% of body weight. Patients should receive information and support to develop individual weight loss goals, learn problem-solving techniques to reach their goals,

and receive follow-up visits to re-evaluate and discuss their goals for losing weight and increasing physical activity (see quality statement 6: Physical Activity). If needed, refer patients to a dietitian or weight-management program. Encourage adults with osteoarthritis who are at a normal weight to maintain their weight.

For Organizations and Health Services Planners

Ensure all health care settings have systems, processes, and resources in place so that people with osteoarthritis who are overweight or obese are offered weight-management strategies to lose weight, and those who are at a normal weight are supported to maintain their weight. This may include information for clinicians on accessing community resources (e.g., referral to a dietitian or weight-management program delivered by a trained professional) when needed.

Quality Indicators: How to Measure Improvement for This Statement

- Percentage of people with osteoarthritis whose waist circumference or body mass index is documented in their medical chart
- Percentage of people with osteoarthritis who are overweight or obese and who receive a documented weight-management strategy
- Local availability of community resources (e.g., dietitian or weight management program delivered by a trained clinician)

Measurement details for these indicators, as well as overarching indicators to measure improvement for the goals of the entire quality standard, are available in the technical specifications.

Quality Statement 8: Pharmacological Symptom Management

People with symptomatic osteoarthritis are offered pain-relieving medication options when nonpharmacological treatments are insufficient to control their symptoms.

Sources: American Academy of Orthopaedic Surgeons, 2020[44] | American Academy of Orthopaedic Surgeons, 2021[39] | American Academy of Orthopaedic Surgeons, 2023[45] | American College of Rheumatology, 2019[34] | Department of Veterans Affairs, Department of Defense, 2020[30] | European League Against Rheumatism, 2018[36] | National Institute for Health and Care Excellence, 2022[23] | Osteoarthritis Research Society International, 2019[40]

Definitions

Symptomatic osteoarthritis: Symptoms vary by osteoarthritis stage (early, moderate, and advanced)[33] and include pain, aching, swelling, stiffness, functional limitations, anxiety and mood disorders, fatigue, and/or poor sleep quality.[14,71,72] These symptoms are all connected and pain is the instigator.

Nonpharmacological treatments: Nonpharmacological treatments include[23]:

- Education, advice, information (see quality statement 3: Patient Education)
- Patient self-management (see quality statement 4: Patient Self-Management Plan)
- Exercise and physical activity (see quality statement 5: Therapeutic Exercise and quality statement 6: Physical Activity)
- Weight loss, for patients who are overweight or obese (see quality statement 7: Weight Management)

Pain-relieving medication options: Pain-relieving medication options include:

- Stepped approach:

    1) Topical therapy for knee, hand, or shoulder; *and/or* low-dose analgesics *and/or* nonsteroidal anti-inflammatory drugs (NSAIDs) for hip, knee, hand, or shoulder, used as required to relieve symptoms
    2) Systemic therapy as a consistent course of treatment, with analgesics *and/or* NSAIDs for hip, knee, hand, or shoulder for symptom regulation

3) For those who have had an inadequate response to steps 1 and 2, selective or higher-dose nonselective NSAIDs in combination with a proton pump inhibitor *and/or* heterocyclic medication with antidepressant activity (SNRIs)
4) Intra-articular corticosteroid injections for the hip, knee, hand, or shoulder may be considered judiciously to control acute pain and reduce episodic inflammatory mediators where short-term relief is required to facilitate a full recovery plan. The benefits need to be weighed against the known risk of cartilage degeneration occurring with corticosteroid exposure[73]

- Opioids should not be used routinely to treat osteoarthritis pain because the potential harms of opioids often outweigh the benefits. For detailed guidance, see the *Opioid Prescribing for Chronic Pain* quality standard
- The potential harms of NSAIDs may also outweigh the benefits in some patients, especially in older adults who use NSAIDs on an ongoing basis. Prescribers should assess patients carefully before recommending NSAIDs and monitor appropriately when patients have risk factors that place them at higher risk for side effects[74]
- Intra-articular hyaluronic acid injections should not be used for people with symptomatic knee, hip, or shoulder osteoarthritis as it does not improve function or reduce pain[23,30,39,44,45]
- Evidence is inconclusive on the use of these medications: platelet-rich plasma and stem cell therapy for hip or knee, glucosamine (for symptom relief), herbal remedies, and supplements[33]
- The following are not recommended: chondroitin and glucosamine (for disease modification), owing to limited and uncertain evidence[23,33,34,40]; medical cannabinoids for pain, owing to lack of evidence and known harms[30,44,75]

Rationale

Overall, the goal of treatment for osteoarthritis should be to improve quality of life. All people with osteoarthritis require nonpharmacological treatments.[23] Despite using them, however, some people experience persistent, significant, activity-limiting symptoms and may need to concurrently use pain-relieving medication. It is important to assess osteoarthritis-related symptoms using valid and reliable measures[33] to understand a patient's pain experience. Medications can target different aspects of a person's pain, including pain experienced with joint use. In addition, sleep problems and psychological factors such as depression and anxiety also contribute to the pain cycle,[13] and treating these downstream effects of osteoarthritis pain with central-acting drugs (e.g., serotonin and norepinephrine reuptake inhibitors [SNRIs]) may be beneficial.[33]

Many clinical trials have found medications (i.e., hyaluronic acid, acetaminophen, glucosamine, chondroitin) are not better than placebo (30% to 40% placebo response), although this does not mean there was no effect for some patients.[76-79] Few trials have been conducted in people with osteoarthritis who also have other conditions such as diabetes and heart disease; this is despite the fact that most people with knee, hip, hand, or shoulder osteoarthritis have at least 1 other chronic condition.[80] Therefore, comorbidities should be considered with any prescribed management plan.

In selecting pain-relieving medication, a stepped approach should be used that takes into consideration risks, side effects, efficacy, costs to the patient, and the person's needs and preferences. Pain-relieving medication options should be offered and then a collaborative approach used to make a plan for symptom management, including reassessments as needed of the response to treatment. Opioids should not be used routinely to treat osteoarthritis pain. The use of opioids is associated with significant harms and side effects, including addiction and fatal and nonfatal overdose. For detailed guidance, see the *Opioid Prescribing for Chronic Pain* quality standard.

What This Quality Statement Means

For People With Osteoarthritis

If things like exercise and weight management are not working well enough to control your symptoms, your primary care clinician should offer you options for pain-relieving medication. If you decide to use pain medication, it is important to continue using other nondrug treatments as well. One does not replace the other.

Your primary care clinician should work with you to make a plan to review your medication use after a certain time. However, if you experience any side effects from the medication, tell your primary care clinician right away.

Your primary care clinician should first offer you a cream to rub over the joint. If this doesn't work for you, they may recommend over-the-counter pills (such as low-dose analgesics and/or nonsteroidal anti-inflammatory drugs), prescription pills, or an injection into the joint.

Your primary care clinician should not offer you an opioid medication as the first or routine treatment for your osteoarthritis pain. These drugs have serious risks including addiction, overdose, and death. For more information, please see the patient guide for the *Opioid Prescribing for Chronic Pain* quality standard.

For Clinicians

For people with symptomatic osteoarthritis in whom nonpharmacological treatments are insufficient to control symptoms, offer pain-relieving medication options in collaboration with the patient (see quality statement 4: Patient Self-Management Plan). Pain-relieving medications include treatments for associated mood or sleep disorders. With respect to medication, the discussion should include information about its benefits, when to take it, how much to take, how long to take it for, any possible side effects, and an agreement to reassess the response to treatment on a regular basis.

If the patient has multiple comorbidities that present challenges to using pain medications, consider referring them for consultation with a rheumatologist or other internal medicine specialist or with a pharmacist regarding drug interactions (see quality statement 9: Referral to a Clinician With Additional Skills in Osteoarthritis Management).

For Organizations and Health Services Planners

Ensure all health care settings have systems, processes, and resources in place for people with osteoarthritis to receive pain-relieving medication options when nonpharmacological treatments are insufficient to control their symptoms.

Quality Indicators: How to Measure Improvement for This Statement

- Percentage of people with osteoarthritis who are prescribed pain-relieving medication and who also receive nonpharmacological treatments
- Percentage of people with osteoarthritis who are prescribed pain-relieving medication and who have a documented discussion of risks and benefits of their medication with their primary care clinician

Measurement details for these indicators, as well as overarching indicators to measure improvement for the goals of the entire quality standard, are available in the technical specifications.

Quality Statement 9: Referral to a Clinician With Additional Skills in Osteoarthritis Management

> People with osteoarthritis, when clinically indicated, are referred by their primary care clinician to a clinician with additional skills in osteoarthritis management.
>
> Source: Advisory committee consensus

Definitions

Primary care clinician: The clinician who is responsible for the person's care (e.g., screening, diagnosis, and management). This is usually the primary care physician, family physician, nurse practitioner, or other clinician with the ability to make referrals, request imaging, and/or prescribe medications.

Clinician with additional skills in osteoarthritis management: Depending on the clinical indication, the referral may be to a clinician with additional skills in osteoarthritis management or the management of osteoarthritis-related symptoms (e.g., pain, poor sleep quality, anxiety and mood disorders, weight management). This includes, but is not limited to, the following professionals: specialist physician (e.g., orthopaedic surgeon, physiatrist, plastic surgeon, rheumatologist); focused-practice physician (e.g., pain management, sport and exercise medicine); nurse practitioner or advanced/extended practice occupational therapist or physiotherapist; chiropractor, dietitian, occupational therapist, pharmacist, physiotherapist; psychologist, counsellor, or other clinician with additional skills in the management of osteoarthritis.

Clinically indicated: Primary care clinicians have the skills to manage osteoarthritis. However, there are clinical indications that prompt a primary care clinician to consider referral to a clinician with additional skills in osteoarthritis management. These include, but are not limited to, the following:

- Uncertain diagnosis, confirmation of diagnosis, atypical features of osteoarthritis, or consideration for alternative diagnosis (see quality statement 1: Clinical Assessment for Diagnosis)
- Unexpected or unusual disease progression or complications
- Surgical or complex weight management (see quality statement 7: Weight Management)
- People with osteoarthritis who are considering joint surgery, whose symptoms are not sufficiently controlled through nonpharmacological and pharmacological management, and whose quality of life is negatively impacted

There are additional circumstances in which some primary care clinicians may wish to refer a patient to a clinician with additional skills in osteoarthritis management. This decision should be made with the patient. Examples of these circumstances include:

- Suboptimal control of symptoms (including inability to reach best potential, unstable pain levels that interfere with daily activities, sleep, and/or function)
- Psychological symptoms that affect the person's ability to participate in self-management of their osteoarthritis
- Escalating or high doses of pain medications (e.g., opioids) or inability to take traditional analgesics and anti-inflammatories owing to allergies or intolerances
- Severity or complexity of the condition, multiple comorbidities (e.g., concern about use of medications, drug interactions, and safety) (see quality statement 2: Comprehensive Assessment to Inform the Care Plan)
- Complex osteoarthritis that requires procedures such as arthrocentesis (joint aspiration) or challenging joint injection and where additional skill is required for the best outcome

Rationale

Primary care clinicians have the skills to manage osteoarthritis care for most people. However, some people with osteoarthritis may benefit from a referral to a clinician with additional skills in osteoarthritis management for further assessment and/or treatment; this person can assist the primary care clinician in implementing the patient's management plans. Before such a referral, primary care clinicians should support patients with nonpharmacological (see quality statements 3 to 7) and pharmacological interventions (see quality statement 8: Pharmacological Symptom Management).

The referral should include the results from the clinical assessment (see quality statement 1: Clinical Assessment for Diagnosis) and the comprehensive assessment (see quality statement 2: Comprehensive Assessment to Inform the Care Plan), the clinical indication for referral, and information about the person's care plan, including a copy of their written self-management plan (see quality statement 4: Patient Self-Management Plan). This information will help ensure people with osteoarthritis are seen according to the urgency of their referral, undergo only those investigations that have not already been completed, and are offered evidence-based comprehensive treatment options.

The referral process should involve an integrated approach where there is collaboration, communication, and shared decision-making to promote patient-centred care (see Appendix 3, Guiding Principles, Integrated Care). In some cases, a consultation between the 2 clinicians may be required. After seeing the patient, the clinician acting in a consulting role should communicate the recommended plan for treatment and follow-up (if needed) to the primary care clinician. The primary care clinician should continue managing the person's care, including coordinating care with other clinicians and integrating treatment plans from any subsequent referrals. Once their symptoms and functional abilities are stable, the patient will usually not need to continue seeing the clinician with additional skills in osteoarthritis management.

What This Quality Statement Means

For People With Osteoarthritis

Your primary care clinician may suggest you see another clinician with additional skills in helping people manage their osteoarthritis symptoms to see if you could benefit from further assessment or treatment. Ask your primary care clinician who will contact you about any upcoming assessment or treatment.

Clinicians you're referred to should send notes about your progress to your primary care clinician. Your primary care clinician should share this information with you at your next appointment.

Your overall care will remain the responsibility of your primary care clinician so that you can avoid unnecessary assessments, investigations, or treatments.

For Clinicians

When clinically indicated, refer people with osteoarthritis for assessment and/or treatment by a clinician with additional skills in osteoarthritis management.

Primary care clinicians: Provide a detailed referral that includes the clinical assessment, comprehensive assessment results, the patient's individualized care plan and self-management plan, and the clinical indication for referral. Tell patients how they will be contacted about the referral appointment.

Clinicians with additional skills in osteoarthritis management: Communicate with the patient's primary care clinician to inform them of the timing of the referral response. After consultation, communicate the recommended plan for treatment and follow-up (if needed) to the patient and their primary care clinician.

For Organizations and Health Services Planners

Ensure systems, processes, and resources are in place so that people with osteoarthritis have timely access to a clinician with additional skills in osteoarthritis management on referral from their primary care clinician. Decisions on referral thresholds should be based on discussions between the patient and family representatives, the referring clinicians, and the clinicians with additional skills in osteoarthritis management.

Quality Indicators: How to Measure Improvement for This Statement

- Percentage of people with osteoarthritis who are referred to a clinician with additional skills in osteoarthritis management when clinically indicated
- Percentage of people with osteoarthritis whose primary care clinician received and shared with them a recommended plan for treatment from the clinician with additional skills in the management of osteoarthritis after their visit
- Median wait time to first appointment with a clinician with additional skills in osteoarthritis management (i.e., additional skills in rheumatology, sport and exercise medicine, or pain management)
- Local availability of clinicians with additional skills in osteoarthritis management

Measurement details for these indicators, as well as overarching indicators to measure improvement for the goals of the entire quality standard, are available in the technical specifications.

Quality Statement 10: Referral for Consideration of Joint Surgery

People with osteoarthritis whose symptoms are not sufficiently controlled through nonsurgical management and whose quality of life is negatively impacted by their joint-related symptoms should be referred for consideration of joint surgery.

Sources: American Academy of Orthopaedic Surgeons, 2020[44] | Department of Veterans Affairs, Department of Defense, 2020[30] | European League Against Rheumatism, 2018[36] | National Institute for Health and Care Excellence, 2022[23]

Definitions

Symptoms are not sufficiently controlled: This occurs when a person with osteoarthritis experiences escalated use of pain medication and/or reduced effectiveness of nonpharmacological and pharmacological pain management strategies.

Quality of life is negatively impacted: This occurs when the person considers the level of their osteoarthritis symptoms—pain, aching, stiffness, sleep interruption, reduced function, etc.—to be unacceptable such that they have difficulty managing on a day-to-day basis.

Nonsurgical management: This includes nonpharmacological (see quality statements 3 to 7) and pharmacological interventions (see quality statement 8: Pharmacological Symptom Management), both of which should be supported before any referral for consideration of joint surgery.

Rationale

People with osteoarthritis should be supported with nonsurgical management before any referral for consideration of joint replacement surgery, joint-conserving surgery (such as osteotomy), or joint fusion or excision in the hand.[23,30,36] An adequate trial of nonsurgical management before exploring a surgical solution will give people with osteoarthritis the best chance of optimizing their quality of life. People who do go on to have a hip or knee joint replacement are likely to have greater functional recovery after surgery if they have better pre-operative physical function.[81]

People with osteoarthritis whose symptoms are not sufficiently controlled after an adequate trial of nonsurgical management—and whose quality of life is negatively impacted such that they have difficulty managing on a day-to-day basis—should be offered referral for consideration of joint

surgery. The decision to refer should be informed by the person's need and fitness for surgery, with potential benefits outweighing risks.[23,30,82,83,84] Considerations include:

- Severity of pain, functional limitations, or other patient-reported osteoarthritis outcomes negatively impacting quality of life despite an adequate trial of nonsurgical management
- General health indicating that they are fit for surgery
- Indication of readiness and willingness to undergo surgery if offered
- Patient's expectations for surgical outcome are realistic and achievable

Patient-specific factors such as age, sex, smoking, obesity, and comorbidities should not be barriers to referral for consideration of joint surgery. When the referring clinician discusses the appropriate criteria with the patient before making a referral, the surgeon–patient decision-making process can be better informed, increasing the likelihood of good surgical outcomes (e.g., meaningful improvement in symptoms related to osteoarthritis or the surgical process and patient-reported satisfaction).[83-85]

There is no role for arthroscopic surgery in the management of knee osteoarthritis[86] or for osteotomy in the management of hand osteoarthritis.[36]

When considering surgical consultation for people with osteoarthritis of the hip, knee, or shoulder, the referring clinician should obtain plain radiographs (i.e., weight-bearing for knee, non–weight-bearing for hip, and anterior to posterior [Grashey view] for shoulder) within the 6-month period prior to the patient's first appointment with a surgeon.[30,44] Advanced imaging, such as magnetic resonance imaging or computed tomography, is not required. People being considered for joint replacement surgery should not receive joint injections in the involved joint if surgery is anticipated within 3 to 6 months.[30]

What This Quality Statement Means

For People With Osteoarthritis

If you have tried to manage your symptoms using the treatments described in this guide, and your osteoarthritis symptoms are making it difficult for you to manage day to day, your clinician may suggest that you be referred for an assessment to see if you could benefit from surgery to realign or replace your painful joint. Joint replacement can greatly reduce pain and improve function for people severely affected by osteoarthritis.

If you have knee osteoarthritis, your surgeon should not offer you a treatment called arthroscopy. (In this procedure, a tube-like device is inserted into a joint to examine and treat it.) Arthroscopy does not reduce pain or improve function in people with knee osteoarthritis, so it should not be used. The benefits do not outweigh the risks.

For Clinicians

Refer people with osteoarthritis for assessment and consideration of joint surgery if the patient has adhered to an adequate trial of nonpharmacological management (see quality statements 3 to 7) and pharmacological management (see quality statement 8) but is experiencing a significant reduction of joint mobility that negatively impacts activities of daily living and quality of life, along with an escalation in the use of pain medication and/or reduced effectiveness of pain management.

For people with knee osteoarthritis, do not refer for surgical consultation for arthroscopic procedures.[86]

If you order x-ray for knee osteoarthritis, specify weight-bearing images.

For Organizations and Health Services Planners

Ensure all primary care clinicians and hospitals have clear policies and processes in place so that people with osteoarthritis are not referred for consideration of joint surgery until they have been supported with an adequate trial of nonsurgical management. People with knee osteoarthritis should not be referred for surgical consultation for arthroscopic procedures. Decisions on referral thresholds should be based on discussions between the patient and family representatives, the referring clinicians, and surgeons.

Quality Indicators: How to Measure Improvement for This Statement

- Percentage of people with osteoarthritis who report that their symptoms are not sufficiently controlled and are negatively impacting their quality of life, who are referred to an orthopaedic surgeon for consideration for joint surgery
- Percentage of people with osteoarthritis referred for consideration of joint surgery who have documentation of having received nonsurgical management prior to their referral
- Percentage of people with knee osteoarthritis who are referred for surgical consultation for an arthroscopic procedure (a lower percentage is better)
- Percentage of people with knee osteoarthritis who undergo a knee arthroscopic procedure (a lower percentage is better)

Measurement details for these indicators, as well as overarching indicators to measure improvement for the goals of the entire quality standard, are available in the technical specifications.

Appendix 1: About This Quality Standard

How to Use This Quality Standard

Quality standards inform patients, clinicians, and organizations about what high-quality care looks like for health conditions or processes deemed a priority for quality improvement in Ontario. They are based on the best evidence.

Guidance on how to use quality standards and their associated resources is included below.

For People With Osteoarthritis

This quality standard consists of quality statements. These describe what high-quality care looks like for people with osteoarthritis.

Within each quality statement, we have included information on what these statements mean for you as a patient.

In addition, you may want to download this accompanying patient guide on osteoarthritis to help you and your family have informed conversations with your clinicians. Inside, you will find information and questions you may want to ask as you work together to make a plan for your care.

For Clinicians and Organizations

The quality statements within this quality standard describe what high-quality care looks like for people with osteoarthritis. They are based on the best evidence and designed to help you know what to do to reduce gaps and variations in care.

Many clinicians and organizations are already providing high-quality, evidence-based care. However, there may be elements of your care that can be improved. This quality standard can serve as a resource to help you prioritize and measure improvement efforts.

Tools and resources to support you in your quality improvement efforts accompany each quality standard. These resources include indicators and their definitions, available in the technical specifications. Measurement is key to quality improvement. Collecting and using data when implementing a quality standard can help you assess the quality of care you are delivering and identify gaps in care and areas for improvement.

There are also a number of resources online to help you, including:

- Our patient guide on osteoarthritis, which you can share with patients and families to help them have conversations with you and their other clinicians. Please make the patient guide available where you provide care
- Our measurement resources, including the technical specifications for the indicators in this quality standard, the “case for improvement” slide deck to help you to share why this standard

was created and the data behind it, and our measurement guide containing supplementary information to support the data collection and measurement process

- Our placemat, which summarizes the quality standard and includes links to helpful resources and tools
- Our *Getting Started Guide*, which includes links to templates and tools to help you put quality standards into practice. This guide shows you how to plan for, implement, and sustain changes in your practice
- Quorum, an online community dedicated to improving the quality of care across Ontario. This is a place where clinicians can share information and support each other, and it includes tools and resources to help you implement the quality statements within each standard

How the Health Care System Can Support Implementation

As you work to implement this quality standard, there may be times when you find it challenging to provide the care outlined due to system-level barriers or gaps. These challenges have been identified and documented as part of the development of the quality standard, which included extensive consultation with clinicians and lived experience advisors and a careful review of available evidence and existing programs. Many of the levers for system change fall within the purview of Ontario Health, and as such we will continue to work to address these barriers to support the implementation of quality standards. We will also engage and support other provincial partners, including the Ministry of Health or other relevant ministries, on policy-level initiatives to help bridge system-level gaps.

In the meantime, there are many actions you can take on your own, so please read the standard and act where you can.

Appendix 2: Glossary

Term	Definition
Adults	People aged 18 years and older.
Care partner	An unpaid person who provides care and support in a nonprofessional capacity, such as a parent, other family member, friend, or anyone else identified by the person with osteoarthritis. Other terms commonly used to describe this role include “caregiver,” “informal caregiver,” “family caregiver,” “carer,” and “primary caregiver.”
Clinicians	Regulated professionals who provide care to patients or clients. This includes, but is not limited to, the following regulated professionals: primary care clinicians (family physician, nurse practitioner); chiropractor, dietitian, nurse, occupational therapist, pharmacist, or physiotherapist; focused-practice physician (e.g., pain management, sport and exercise medicine); specialist physician (e.g., orthopaedic surgeon, physiatrist, plastic surgeon, rheumatologist); advanced/extended practice physiotherapist or occupational therapist; psychologist, counsellor, or other clinician with additional skills in the management of osteoarthritis-related symptoms (e.g., pain, poor sleep quality, anxiety and mood disorders, weight management).
Culturally appropriate care	Care that incorporates cultural or faith traditions, values, and beliefs; is delivered in the person’s preferred language; adapts culture-specific advice; and incorporates the person’s wishes to involve family or community members.
Family	The people closest to a person in terms of knowledge, care, and affection; this may include biological family or family of origin, family through marriage, or family of choice and friends. The person defines their family and who will be involved in their care.
Health care team	Clinicians, as well as people in unregulated professions, such as administrative staff, behavioural support workers, patient transport staff, personal support workers, recreational staff, spiritual care staff, and volunteers.
Primary care	A setting where people receive general health care (e.g., screening, diagnosis, and management) from a clinician who the person can access directly without a referral. This is usually the primary care clinician, family physician, nurse practitioner, or other clinician with the ability to make referrals, request laboratory testing, and prescribe medications.
Primary care clinician	A family physician (also called a primary care physician) or nurse practitioner.

Appendix 3: Values and Guiding Principles

Values That Are the Foundation of This Quality Standard

This quality standard was created, and should be implemented, according to the Patient, Family and Caregiver Declaration of Values for Ontario. This declaration "is a vision that articulates a path toward patient partnership across the health care system in Ontario. It describes a set of foundational principles that are considered from the perspective of Ontario patients, and serves as a guidance document for those involved in our health care system."

These values are:

- Respect and dignity
- Empathy and compassion
- Accountability
- Transparency
- Equity and engagement

A quality health system is one that provides good access, experience, and outcomes for all people in Ontario, no matter where they live, what they have, or who they are.

Guiding Principles

In addition to the above values, this quality standard is guided by the principles outlined below.

Acknowledging the Impact of Colonization and Racism

Clinicians should acknowledge and work toward addressing the historical and present-day impacts of colonization and racism in the context of the lives of Indigenous Peoples and racialized people throughout Canada. This work involves being sensitive to the impacts of intergenerational and present-day traumas and the physical, mental, emotional, and social harms experienced by Indigenous and racialized people, families, and communities, as well as recognizing their strength and resilience. This quality standard uses existing clinical practice guideline sources that may not include culturally appropriate care or acknowledge traditional Indigenous beliefs, practices, and models of care relevant to Indigenous and racialized people.

French Language Services

In Ontario, the *French Language Services Act* guarantees an individual's right to receive services in French from Government of Ontario ministries and agencies in 26 designated areas and at government head offices.[87]

Harm Reduction

Harm reduction is an approach to care that focuses on positive change. People who use alcohol should be offered care for their alcohol use free of judgement, coercion, or discrimination, and stopping alcohol use should not be required to receive care. A harm reduction approach supports the person where they are in their journey to change their relationship with alcohol, recognizing that not all patients are willing or able to reduce or stop their alcohol consumption even if this is recommended by their clinician. Harm reduction strategies include working with the person to reduce their alcohol consumption (e.g., total consumption or drinking days per week), avoid drinking and driving, and optimize their engagement in their care; offering resources and care for physical and mental health impacts of alcohol use, regardless of the person's ability or willingness to reduce alcohol use; and connecting patients with resources to address inequities in the social determinants of health (e.g., housing, legal services, social supports, employment services).

Integrated Care

People with osteoarthritis should receive care through an integrated team–based approach that facilitates access to interprofessional services from primary care clinicians, rehabilitation care clinicians, surgical and nonsurgical specialists, and programs in the community, according to the patient's needs over time.[88] Clinicians should work with patients, their families and care partners, and communities to deliver the highest quality of care.[89] Interprofessional collaboration, shared decision-making, coordination of care across different settings within and beyond the health sector, and continuity of care (including follow-up care) are hallmarks of this patient-centred approach.[88]

Social Determinants of Health

Homelessness and poverty are 2 examples of economic and social conditions that influence people's health, known as the social determinants of health. Other social determinants of health include employment status and working conditions, race and ethnicity, food security and nutrition, gender, housing, immigration status, social exclusion, and residing in a rural or urban area. Social determinants of health can have strong effects on individual and population health; they play an important role in understanding the root causes of poorer health. People with osteoarthritis should be provided services that are respectful of their gender, sexual orientation, socioeconomic status, housing, age, background (including self-identified cultural, ethnic, and religious background), and disability. Equitable access to the health system also includes access to culturally safe care. Language, a basic tool for communication, is an essential part of safe care and needs to be considered throughout a person's health care journey. For example, in predominantly English-speaking settings, services should be actively offered in French and other languages.

Chronic Disease Self-Management

People with osteoarthritis should receive services that are respectful of their rights and dignity and that promote shared decision-making and self-management.[90] Further, people should be empowered to make informed choices about the services that best meet their needs.[91,92] People with osteoarthritis should engage with their clinicians in informed, shared decision-making about their treatment options. Each person is unique and has the right to determine their own path toward health and well-being.[90]

Strengths-Based Care

A strengths-based practice actively involves the person and the clinician who supports them in working together to achieve the person's intended outcomes in a way that draws on the person's strengths.[93,94] The person is recognized and acknowledged as the expert of their own lived experience, and the clinician is recognized as an expert in their discipline and in facilitating a conversation that reinforces the person's strengths and resources.

Trauma-Informed Care

Trauma-informed care is health care that reflects an understanding of trauma, the impact that traumatic experiences can have on human beings, and the potential to traumatize or retraumatize patients when providing them with care.[95,96] A trauma-informed approach does not necessarily involve addressing the trauma directly. Rather, it involves acknowledging that a person may have experienced a previous traumatic event that may contribute to their current health concerns, and taking steps to reduce opportunities for traumatization (e.g., using active strategies around consent, attending to individual patient needs, recognizing the inherent power imbalance in clinician–patient relationships, and facilitating greater patient agency and choice in all interactions).[97,98] A trauma-informed approach emphasizes the creation of an environment in which a person can feel comfortable disclosing trauma, and it involves understanding, respecting, and responding to the effects of trauma.[96-98]

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We are an agency created by the Government of Ontario to connect, coordinate, and modernize our province's health care system. We work with partners, providers, and patients to make the health system more efficient so everyone in Ontario has an opportunity for better health and well-being.

Equity, Inclusion, Diversity, and Anti-Racism

Ontario Health is committed to advancing equity, inclusion and diversity and addressing racism in the health care system. As part of this work, Ontario Health has developed an Equity, Inclusion, Diversity and Anti-Racism Framework, which builds on existing legislated commitments and relationships and recognizes the need for an intersectional approach.

Unlike the notion of equality, equity is not about sameness of treatment. It denotes fairness and justice in process and in results. Equitable outcomes often require differential treatment and resource redistribution to achieve a level playing field among all individuals and communities. This requires recognizing and addressing barriers to opportunities for all to thrive in our society.

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