



“Information Booklet on “Chronic Pain
(Arthritis): A Guide to Long-Term Management
to Health and Care Service Users”

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Introduction

Chronic arthritis- chronic pains in the joints (e.g., osteoarthritis or rheumatoid arthritis) result in permanent pain, stiffness and lack of movement. It is very common e.g., in 2019, it was estimated that 528 million people around the world had osteoarthritis and around 10-11 million people in the UK had osteoarthritis (1 in 6 adults) (World Health Organization, 2023). The guide

expounds on chronic arthritis and its effects and causes and its support to affected individuals by the UK health services. It focuses on risk factors and evidence-based interventions, theoretical models of care (House of Care and Chronic Care Model), UK policies and practical self-management and person-centred care.

Definition, Prevalence and Risk Factors of Chronic Arthritis

What is Chronic Arthritis?

The term “arthritis” literally means inflammation of joints, and is used as an umbrella for many chronic joint conditions (Bitesize, 2020). Arthritis is a disease that causes damage in joints. Arthritis can affect any joint, but is most common in people’s:

- Hands and wrists.
- Knees.
- Hips.
- Feet and ankles.
- Shoulders.
- Lower back (lumbar spine).

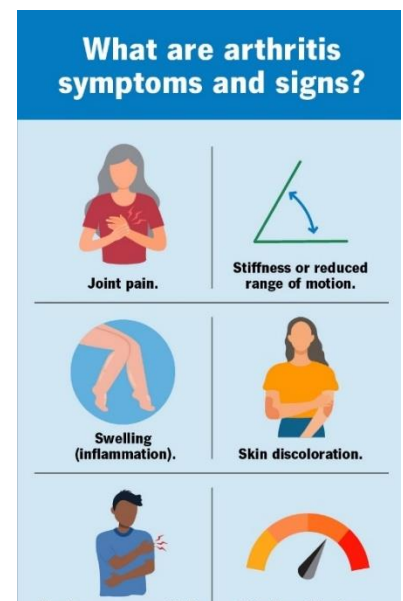
There are about 100 distinct varieties of arthritis. The most prevalent categories comprise:

- **Osteoarthritis:** Degenerative joint disease.
- **Rheumatoid arthritis:** A condition characterised by the immune system erroneously attacking and damaging the joints (Coates et al., 2023).
- **Gout:** A kind of arthritis characterised by the formation of sharp uric acid crystals in the joints.

- **Ankylosing spondylitis:** A kind of arthritis that affects the joints next to the lower back.
- **Psoriatic arthritis:** A kind of arthritis that affects individuals with psoriasis.
- **Juvenile arthritis:** Arthritis occurring in individuals under the age of 16 (Cohen, Vase and Hooten, 2021).

The most common arthritis symptoms and signs include:

- Joint pain.
- Stiffness or reduced range of motion (how far you can move a joint).
- Swelling (inflammation).
- Skin discoloration.
- Tenderness or sensitivity to touch around a joint.
- A feeling of heat or warmth near your joints.



Source:(Cleveland Clinic, 2023)

Global and UK Prevalence and Statistics

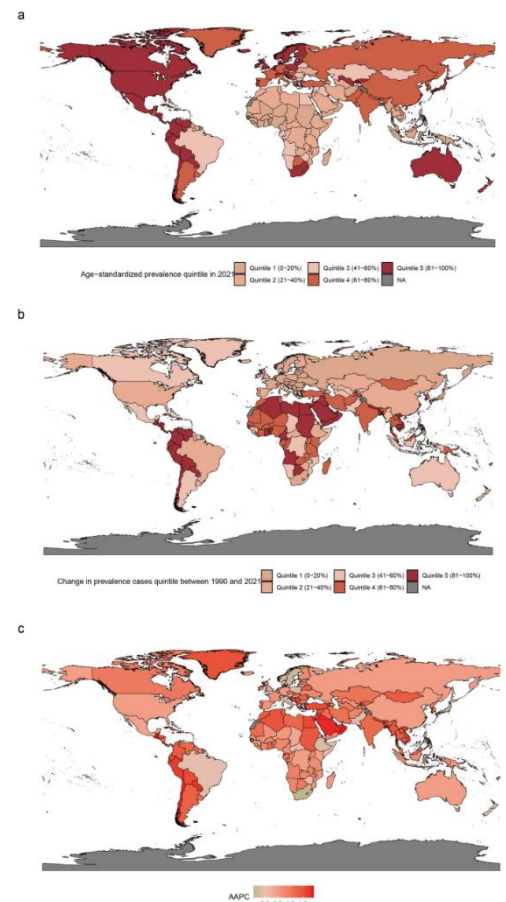
Globally, arthritis is a leading cause of disability, affecting over 350 million people (World Health Organization, 2022). **Osteoarthritis** is the most common form.

- ✓ **Prevalence:** 595 million people had osteoarthritis in 2020, which is 7.6% of the global population (Office, 2025).
- ✓ **Incidence:** Cases have increased by 113% since 1990, and they are expected to continue rising due to population aging and increasing obesity rates (Lambert, 2024).

Rheumatoid Arthritis (RA)

- ✓ **Prevalence:** In 2021, 17.9 million people worldwide had RA (Kroenke et al., 2023).
- ✓ **Incidence:** The global age-standardized incidence rate (ASIR) increased from 1990 to 2021.
- ✓ **Age distribution:** The majority of people with RA are under 65, and more women are diagnosed than men.

Source: (Ma et al., 2025)



Approximately 10-11 million individuals in the UK have a diagnosed state of arthritis approximately one out of every six adults (NHS, 2023). The national health data and NHS indicate that a long-term MSK (arthritis or joint) problem is self-reported in an estimated 17-18 per cent of adults in England (NHS England, 2021). The conditions are overrepresented in older adults (OA is rare below 45 years), as well as women (approximately 60-70% of arthritis patients) (NICE, 2022).



Figure: Proportion of adults reporting a chronic musculoskeletal condition in England (2024) Source: (Office, 2025)

According to the official statistics of NHS England, the figure above shows that the level of musculoskeletal problems (arthritis or joint issues) is extremely high in the UK.

- In 2024, the percentage of individuals aged 16 and older self-reporting a long-term musculoskeletal ailment was 17.9% (Office, 2025).
- The incidence of self-reported musculoskeletal problems was lower in men (15.6%) compared to girls (20.0%) (Srikesavan, Williamson and Lamb, 2025).
- The incidence of self-reported musculoskeletal problems above the England average for those from the White English, Welsh, Scottish, Northern Irish,

or British ethnic group (21.0%), the White Irish ethnic group (20.9%), and the Black Caribbean ethnic group (20.2%) (Valabhji et al., 2023).

- In 2024, the percentage of individuals self-reporting a minimum of two long-term conditions, with at least one being musculoskeletal-related, was 13.4%.

Risk Factors

Arthritis encompasses more than 100 distinct forms of joint disorders and ailments, impacting individuals of various ages, genders, and lifestyles.



Source: (Lambert, 2024)

risk factors **Source: (**
may increase the
probability of acquiring arthritis.

Arthritis arises from a mix of modifiable and non-modifiable factors.

Factors associated with chronic pain.

Modifiable	Pain Mental health Other co-morbidities Smoking Alcohol Obesity Physical activity/exercise Sleep Nutrition Employment status and occupational factors
Non-modifiable	Age Sex Cultural background Socioeconomic background History of trauma/injury/interpersonal violence Heritable factors (including genetic)

Modifiable factors associated with pain

- **Pain:** The primary clinical risk factor for chronic pain is the presence of pain, whether acute or chronic in a different location. Increased intensity of acute pain and a higher number of pain locations correlate with a larger likelihood of developing severe chronic pain. Evidence indicates that brain alterations linked to chronic pain may be reversible after adequate therapy (Cleveland Clinic, 2023).
- **Mental health:** Anxiety, sadness, and catastrophic

thoughts about pain are correlated with the existence of chronic pain and an unfavourable prognosis in individuals with diverse pain syndromes (Coulter et al., 2016).

- The incidence of chronic pain is greater in those with **comorbid** chronic disorders compared to those without such conditions. For instance, around one-third of those with coronary heart disease also have chronic pain, and a comparable proportion of those with chronic obstructive lung disease suffer from chronic pain (Dixon and Roberts, 2013).
- **Smoking:** Studies indicate that the prevalence of smoking among pain individuals exceeds that of the general population (Hsieh et al., 2022). Heavy smokers often report a greater number of pain sites and heightened pain severity compared to those who have never smoked.
- **Alcohol:** in addition to the intrinsic risks associated with the combination of alcohol and pharmaceuticals, the most significant analgesic effects are seen when alcohol is ingested at

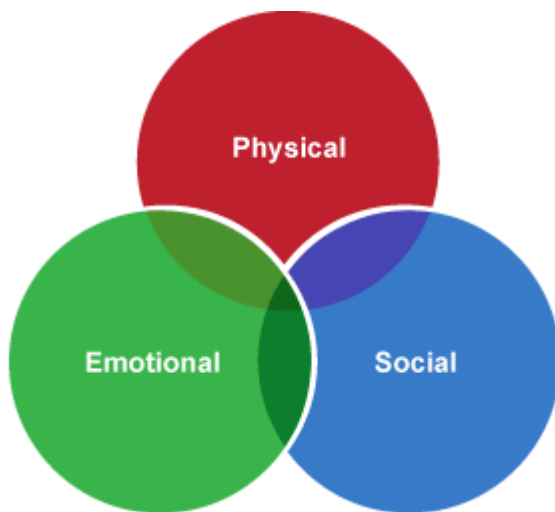
quantities beyond the recommended limits for safe daily consumption (Knopp-Sihota et al., 2022).

Non-modifiable factors associated with pain

- **Old age:** The link between old age and pain is complicated. Chronic pain and severe debilitating chronic pain are more common in elderly age.
- **Female Sex:** Chronic pain disorders are more common in women. Several reviews compare male and female pain sensations by sex (biological) and gender (role) (Walker, Boaz and Hurley, 2020).
- **Ethnicity and culture:** Pain is complicated and impacted by numerous biopsychosocial systems. According to WHO (2023) World Mental Health Surveys, developed (37%) and developing (41%) nations have comparable chronic pain rates.
- **Socioeconomic background:** Pain gradients indicate population-level variables have an impact on chronic illness.

Impact of Chronic Arthritis and Evidence-Based NHS Treatments

Physical, Psychological and Social Implications



Source: (Bitesize, 2020)

Physical Impact: Chronic arthritis is a condition that results in long-term pain of the joints, stiffness and swelling that limits movement and overall performance (van Hecke, Torrance and Smith, 2013). Patients will have difficulty walking, ascending stairs, holding objects or self-care activities. With time, joint damage may be serious: cartilage erosion in OA or joint erosion in RA may result

in a deformity and even loss of joint functionality. Severe arthritis may impair the capacity to move or exercise, and this can lead to muscle weakness and comorbidities (heart disease,

obesity, diabetes). The presence of both OA and inflammatory arthritis may lead to chronic fatigue and general malaise because the organism tries to deal with persistent pain and inflammation (Veronese et al., 2022). Individuals can also develop complications: RA can attack other organs (heart, lungs) and give systemic manifestations.

Psychological Impact: Psychological distress normally goes with living with constant pain and limitations. Arthritis patients are much more likely to have depression and anxiety. As an illustration, individuals who experience chronic arthritis pain are about four times more inclined to suffer depression than the rest. The nationwide statistics show that patients with any MSK ailment are approximately 1.4 times more likely to report a mental health issue as compared to individuals who do not experience MSK issues (Scott et al., 2024). Arthritis may also compromise self-esteem and independence thus causing isolation and frustration. According to the WHO (2022), significant declines in quality of life are associated with chronic osteoarthritis specifically, frequently including sleeping difficulties, weakness, and

solitude. Caregivers and health professionals know chronic pain is mentally draining on its own since it can become catastrophizing (fear of movement, hopelessness) without the necessary psychological support.

Social and Economic Impact: Arthritis is a costly disease to the society. Many patients have to decrease their working hours or quit their jobs physically because they can no longer work full-time or perform demanding tasks. In recent studies carried out in the UK, it was found that the likelihood of people with arthritis to be in employment was 3.4 percentage points lower than that of people without health issues (Rivero et al., 2022). In 2022 by itself, the loss of 23.4 million working days in the UK was associated with MSK conditions (primarily arthritis) (Sánchez-Flórez et al., 2021). Approximately a third of employees who had a long-term health condition (usually arthritis) had never told their employer about it, even though a half of them said their symptoms impact their work.

Impact on Family and Caregivers: A lot of individuals who have arthritis need informal assistance of friends or relatives. Dressing, cooking, and transportation are some of the activities that carers assist in, and they may be

physically exhausting and time consuming. Emotional burden (witnessing suffering of a loved one), financial (reduced working time), and health outcomes (aches, stress), are some of the strains on the carers, many of whom are aging themselves (Reidy, 2019). Support services (respite care, carer counselling, financial benefits) are available but they are not utilized to an extent. Altogether, chronic arthritis impacts the quality of life of the patient, as well as family well-being and resources.

Evidence-Based Treatments and Support

Medical Management



The NHS offers various evidence-based interventions of chronic arthritis, depending on the nature and level of disease.

- **Inflammatory arthritis** (e.g., RA), disease-modifying drugs (DMARDs), like methotrexate, are used as first-line drugs since they reduce the rate of disease

progression and damage to joints. In case of necessity, biologic therapies (injections that are aimed at immune pathways) or more recent JAK inhibitors are employed (McQueenie et al., 2021). Central in this is managing pain: NICE and NHS guidelines suggest simple analgesics (paracetamol) and non-steroidal anti-inflammatory drugs (NSAIDs, e.g., ibuprofen or naproxen) in the management of pain and inflammation (Plan, 2019).

- **Osteoarthritis**, the pharmacological choice is aimed at pain treatment; NSAIDs and topical creams are utilized under precautions due to their side effects. More importantly, non-pharmacological treatments are in the front line. According to NICE OA guidelines (NG226, 2022), exercise, weight loss (when overweight) and physiotherapy are highlighted (Overstreet et al., 2023).

Rehabilitation and Allied Support

- **Physiotherapy** helps by teaching exercises and movement strategies; NHS physios also use heat/ice,

TENS, and splints for pain relief (NHS, 2023).

- **Occupational therapy** assists patients in adapting daily activities (e.g., using jar-openers, alternative posture) to protect joints.
- **Assistive devices** (walking aids, stair rails) may be provided by social care to ensure home safety as mobility declines.

Surgery

- Surgery for osteoarthritis is only required in rare circumstances when other therapies fail or daily life is severely disrupted (NHS, 2023).
- Your GP will recommend you to an orthopaedic surgeon for osteoarthritis surgery. Osteoarthritis surgery may improve symptoms, mobility, and quality of life.
- Surgery may not eliminate your problems, and you may still feel pain and stiffness.

Opioids

- Opioids, including codeine, are another category of analgesics that may alleviate intense pain.
- General practitioners often prescribe opioids just for short-

term usage because to adverse effects like sleepiness, nausea, and constipation (NHS England, 2021).

Theoretical Models of Long-Term Care

The treatment of chronic arthritis tends to be managed in systematic patterns that focus on active coordinated management. There are two powerful models: the House of Care and the Chronic Care Model (CCM).

House of Care (UK model)



Source: (Reidy, 2019)

The House of Care is a metaphor of long-term care in primary care in England and Wales, which started with the Year of Care diabetes program (British Heart Foundation, 2015). It establishes the individual with the condition as the centre of a care

planning discussion. The walls of the house are represented by informed and engaged patients on one side and ready and proactive healthcare professionals on the other side (Knopp-Sihota et al., 2022). The roof represents assisted self-management, which is under a firm basis of organizational procedures and commissioning. Practically, it implies that there is no episodic care: patients meet with their care team to work out individual objectives and courses of action. The needs of every patient (mobility objectives, pain objectives, psychological well-being, etc.) are met through a cooperative effort (Lohan et al., 2023). Different teams (GPs, nurses, therapists) in healthcare are trained to assist with shared decision-making. Importantly, local systems offer the instruments (disease registers, care coordinators, community programs) in such a way that the care plan is adopted.

Chronic Care Model (International)

The Chronic Care Model (CCM)



Source: (Center for Accelerating Care Transformation, 2024)

The CCM is a document that, developed by Wagner et al., describes six key aspects of chronic disease care (Finnigan, 2022). These elements are self-management support (teaching skills and confidence to patients), design of delivery systems (organised, team-based care of defined roles), decision support (evidence-based guidelines being incorporated into practice), clinical information systems (registries and reminders to proactive care), healthcare organisation (leadership commitment to chronic care), and community resources (linking patients to local support). The healthcare system becomes proactive (follow-up, prevention) rather than reactive (treatment of flares) under

CCM (Center for Accelerating Care Transformation, 2024). In the case of arthritis, it will involve the coordination of activity between GPs, specialists and rehab, to provide yearly reviews and referrals, and to provide education program support to patients. Both the models focus on teamwork, patient education and continuous management, though the CCM is more of a general framework whereas House of Care is a more specific implementation with the UK specific care-planning conversations. Practically, a mixture of these concepts exists in most UK GP practices: e.g., arthritis registers in EMRs (CCM) and annual reviews of care plans (House of Care) (Plan, 2019).

In the case of arthritis, the application of such models implies that the care is combined between acute flares and is not a matter of chance over time.

UK Policy and Health Services Initiatives

National Strategies

MSK (musculoskeletal) health has been identified by the NHS and UK government as priority. MSK care Community based MSK care was committed to in the NHS Long Term Plan (2019). Interestingly, it funded trials of First Contact Practitioners physiotherapists integrated into GP practices who can be able to assess joint pain on the spot, which will lead to fewer referrals and waiting times (Ma et al., 2025). Initial outcomes showed a high level of patient satisfaction and cost-saving because numerous patients were released following a single physiotherapy session. These services are still being rolled-out, and this is in line with the vision to treat more individuals nearer to home. Rehabilitation was also a fundamental part of NHS care as promoted by The Plan, and musculoskeletal services as a necessity of an aging population (Mathias et al., 2021).

More recently, NHS England developed a national MSK Health and Transformation Programme (since 2021) to partner with patient populations and clinicians to transform

services (NHS England, 2021). The most notable ones are the creation of shared decision support tools to MSK conditions and a digital playbook to MSK services. Best practices are defined by quality standards and NICE guidelines (e.g., NICE NG226 on OA in 2022, NG100 on RA), which all NHS commissioners should adhere to (McLoone et al., 2023). In the UK, there was the so-called **10 million campaign (Versus Arthritis campaign)** aimed at spreading awareness and funding of arthritis research and services.



Local/Regional Actions

MSK strategies have been developed at the local level, through the Integrated Care Systems (ICSs) and Primary Care Networks (PCNs). Numerous locations have become directly accessible to physiotherapy (according to the NHS

pilots) and community exercise/pain management programs (McQueenie et al., 2021). Social prescribing connects the patients to local physical activity and weight-management sessions. MSK is a common health priority in the Local Health and Wellbeing Boards. Certain areas have certain musculoskeletal routes such as quick access clinic on inflammatory arthritis (as early RA treatment is crucial) and central triage to direct the patients effectively. Also, such policies as Personalised Care require giving patients with long-term conditions a care plan and self-management support in accordance with the House of Care philosophy regardless of the condition (Overstreet et al., 2023).

Recommendations into Person-Centred Care Approaches

 **Emphasizing Self-Management:** Since arthritis is lifelong, enabling patients to control it is crucial. Setting functional objectives (e.g., “walk to the shops without a rest”) and using self-help tools are recommended. Online information (NHS.uk arthritis pages), patient education

courses, and nurse or physiotherapist coaching may support self-management (Rivero et al., 2022). “Shared care planning” involves creating a personalised care plan where people describe their strengths (exercise, medicine) and weaknesses. This collaborative approach is key to the House of Care and boosts patient confidence and adherence.

Lifestyle Support and Advice:

The advice on the diet and exercise is regularly incorporated. At least 2.5 hours of moderate exercise during the week (brisk walking or swimming) are advised by NHS guidelines. Quitting smoking is recommended because smoking deteriorates RA and reduces bone (Scott et al., 2024).

Mental Health and Social Support:

With the acknowledgement of the psychological burden of arthritis, new care models incorporate mental health explicitly. Clinics can identify depression or anxiety during a regular visit and send a patient to counselling or a pain management course that is based on CBT. Peer support is

also promoted: patient forums and online groups (provided by such charities as Arthritis UK) offer emotional support and useful advice (Srikesavan, Williamson and Lamb, 2025).

End-of-Life Considerations:

Chronic arthritis is not a terminal disease but it is progressive and the quality of life is highly affected. In frail and multi-morbid patients with advanced conditions, palliative care principles can be used with the emphasis on symptom management (pain management, mobility support) and mental health (Valabhji et al., 2023). In highly severe cases (particularly when elderly patients are involved and face several conditions), clinicians should take into account the concept of advanced care planning, so that the patient preferences regarding intensive medical methods and end-of-life care are considered (Walker, Boaz and Hurley, 2020).

To improve person-centred care, services should increase education and self-management support and prioritise each person's values and goals in their

care plan. Patients, families, and multidisciplinary teams must work together. According to House of Care, arthritis patients should have regular care-plan reviews to adjust treatments. Integrating mental health screening and social care (home help, carer support) can address broader impacts.

Conclusion

Chronic arthritis is one of the significant health issues among people and the UK health system in the long-term. Through its causes, effects and management strategies, patients and providers can collaborate to keep the mobility and quality of life. The combination of medical therapy (medications and surgery), rehabilitation (exercise and therapy), and self-management support is an

effective management applied in a person-centred system. The UK programs of national guidelines to local physiotherapy services are designed to provide coordinated proactive care, based on models such as House of Care and Chronic Care Model. Among chronic arthritis patients, education, empowerment, and holistic support would help them live active and meaningful lives despite the challenge of the condition.

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