# Spondyloarthritis

# NICE quality standard

## Draft for consultation

January 2018

**This quality standard covers** diagnosing and managing spondyloarthritis in adults aged 16 and over. It describes high-quality care in priority areas for improvement.

**It is for** commissioners, service providers, health practitioners and the public.

This is the draft quality standard for consultation (from 26 January to 23 February 2018). The final quality standard is expected to publish in June 2018.

## Quality statements

Statement 1 Adults with signs and symptoms of axial or peripheral spondyloarthritis are referred to a rheumatologist.

Statement 2 Adults with suspected axial spondyloarthritis and an X-ray that does not show sacroiliitis have an inflammatory back pain MRI.

Statement 3 Adults with axial spondyloarthritis are referred to a specialist physiotherapist for a structured exercise programme.

Statement 4 Adults with spondyloarthritis and a flare management plan are given information on how to access care during flares.

NICE has developed guidance and a quality standard on patient experience in adult NHS services (see the NICE pathway on patient experience in adult NHS services, which should be considered alongside these quality statements.

Other quality standards that should be considered when commissioning or providing spondyloarthritis services include:

- Low back pain and sciatica in over 16s (2017) NICE quality standard 155
- Multimorbidity (2017) NICE quality standard 153
- Medicines optimisation (2016) NICE quality standard 120
- Psoriasis (2013) NICE quality standard 40
- Rheumatoid arthritis in over 16s (2013) NICE quality standard 33

A full list of NICE quality standards is available from the quality standards topic library.

# Questions for consultation

## *Questions about the quality standard*

**Question 1** Does this draft quality standard accurately reflect the key areas for quality improvement?

**Question 2** Are local systems and structures in place to collect data for the proposed quality measures? If not, how feasible would it be for these to be put in place?

**Question 3** Do you think each of the statements in this draft quality standard would be achievable by local services given the net resources needed to deliver them? Please describe any resource requirements that you think would be necessary for any statement. Please describe any potential cost savings or opportunities for disinvestment.

## *Local practice case studies*

**Question 4** Do you have an example from practice of implementing the NICE guideline that underpins this quality standard? If so, please submit your example to NICE local practice case studies on the NICE website. Examples of using NICE quality standards can also be submitted.

# Quality statement 1: Referral for suspected spondyloarthritis

## *Quality statement*

Adults with signs and symptoms of axial or peripheral spondyloarthritis are referred to a rheumatologist.

## *Rationale*

Both axial and peripheral spondyloarthritis are difficult to diagnose without specialist assessment. Delays in correctly identifying and diagnosing spondyloarthritis can result in significant morbidity, and waste resources on inappropriate investigations and treatments. Referring adults with signs of spondyloarthritis to a rheumatologist will reduce delays in diagnosis and starting treatment. This will help improve outcomes, such as reducing joint and tendon damage, loss of function, pain and fatigue.

## *Quality measures*

### Structure

a) Evidence of local arrangements to raise awareness of signs and symptoms of axial and peripheral spondyloarthritis in primary care.

***Data source:*** Local data collection, for example from education programmes or awareness campaigns.

b) Evidence of local referral criteria and pathways to ensure that adults with signs and symptoms of axial or peripheral spondyloarthritis are referred to a rheumatologist.

***Data source:*** Local data collection, for example from referral pathways or referral strategies.

### Process

Proportion of adults with signs and symptoms of axial or peripheral spondyloarthritis referred to a rheumatologist.

Numerator – the number in the denominator referred to a rheumatologist.

Denominator – the number of adults with signs and symptoms of axial or peripheral spondyloarthritis.

***Data source:*** Local data collection, for example local audit of patient records.

**Outcome**

a) Time from first presentation of symptoms to diagnosis for adults with spondyloarthritis.

***Data source:*** Local data collection, for example local audit of patient records.

b) Health related quality of life score of adults with spondyloarthritis.

***Data source:*** Local data collection, for example survey of adults with axial spondyloarthritis using a quality of life questionnaire.

c) Functional ability score of adults with axial spondyloarthritis.

***Data source:*** Local data collection, for example survey of adults with axial spondyloarthritis using a questionnaire to assess functional ability (such as the Bath Ankylosing Spondylitis Functional Index).

d) Joint replacement surgery for adults with peripheral spondyloarthritis.

***Data source:*** Local data collection, for example local audit of patient records.

## *What the quality statement means for different audiences*

**Service providers** (such as GP practices and musculoskeletal interface, ophthalmology, dermatology and gastroenterology services) ensure that healthcare professionals are aware of the signs, symptoms and risk factors of axial and peripheral spondyloarthritis. They develop referral criteria and pathways to ensure that people with signs and symptoms of spondyloarthritis are referred to rheumatologists for assessment and diagnosis.

**Healthcare professionals** (such as GPs, physiotherapists, nurses, dermatologists, gastroenterologists and ophthalmologists) are aware of the signs, symptoms and risk

factors of axial and peripheral spondyloarthritis; the groups of people it can affect; the characteristics of inflammatory back pain; extra-articular features such as uveitis, psoriasis and inflammatory bowel disease and of local referral pathways. They identify people who have signs and symptoms of spondyloarthritis and refer them to a rheumatologist for investigation and diagnosis.

**Commissioners** (clinical commissioning groups and NHS England) have service specifications for rheumatology that include referral criteria and referral pathways to ensure that adults presenting with signs and symptoms of axial or peripheral spondyloarthritis are referred to a rheumatologist for investigation and diagnosis.

**Adults with signs and symptoms that suggest they may have spondyloarthritis** (a type of inflammatory arthritis) are referred to a specialist in rheumatology for tests such as an X-ray or a scan. People who have these tests will find out whether or not they have spondyloarthritis faster and can start treatment earlier.

### *Source guidance*

Spondyloarthritis in over 16s: diagnosis and management (2017) NICE guideline NG65, recommendations 1.1.5, 1.1.8, 1.1.9 and 1.1.10

### *Definitions of terms used in this quality statement*

#### Signs and symptoms of axial or peripheral spondyloarthritis

Signs and symptoms of axial spondyloarthritis for the purpose of identifying people for referral to a rheumatologist are a combination of low back pain that started before the age of 45 years and has lasted for longer than 3 months, and:

- 4 or more of the following additional criteria present:
  - low back pain that started before the age of 35 years (this further increases the likelihood that back pain is due to spondyloarthritis compared with low back pain that started between 35 and 44 years)
  - waking during the second half of the night because of symptoms
  - buttock pain
  - improvement with movement
  - improvement within 48 hours of taking non-steroidal anti-inflammatory drugs

  - a first-degree relative with spondyloarthritis
  - current or past arthritis
  - current or past enthesitis (inflammation of a site at which a tendon or ligament attaches to bone)
  - current or past psoriasis.

**or**

- 3 of the above additional criteria and a positive result from a HLA‑B27 test.

Signs, symptoms and risk factors that indicate an adult could have peripheral spondyloarthritis and should be referred to a rheumatologist are:

- new‑onset inflammatory arthritis, unless it is rheumatoid arthritis, gout or acute calcium pyrophosphate arthritis ('pseudogout') that is suspected
- dactylitis (inflammation of a finger or toe characteristically resulting in a sausage appearance of the affected digit)
- enthesitis without apparent mechanical cause if:
  - it is persistent or
  - it is in multiple sites or
  - any of the following are also present:
    - ◊ back pain without apparent mechanical cause
    - ◊ current or past uveitis
    - ◊ current or past psoriasis
    - ◊ gastrointestinal or genitourinary infection
    - ◊ inflammatory bowel disease (Crohn's disease or ulcerative colitis)
  - a first-degree relative with spondyloarthritis or psoriasis.

[NICE’s guideline on spondyloarthritis, recommendations 1.1.5, 1.1.8, 1.1.9, 1.1.10 and glossary in the full guideline]

### *Equality and diversity considerations*

There is a common misconception that axial spondyloarthritis is predominantly a condition that affects men. Healthcare professionals should be aware that axial spondyloarthritis affects a similar number of women as men.

# Quality statement 2: Diagnosis of axial spondyloarthritis using imaging

## *Quality statement*

Adults with suspected axial spondyloarthritis and an X-ray that does not show sacroiliitis have an inflammatory back pain MRI.

## *Rationale*

No single test can be used for diagnosing axial spondyloarthritis. Blood tests for HLA-B27 may be negative and may not show raised inflammatory markers in adults with spondyloarthritis. X-rays can diagnose ankylosing spondylitis, but in some cases it can take several years for changes to become detectable by X-ray, and sometimes changes may never show. Where plain film X-ray does not show sacroiliitis, MRI using an inflammatory back pain protocol can diagnose non-radiographic axial spondyloarthritis and enable effective treatment to start.

## *Quality measures*

### Structure

a) Evidence of local arrangements to ensure that rheumatologists can access X-ray and MRI diagnostic services for people with suspected axial spondyloarthritis.

***Data source:*** Local data collection, for example from referral pathways or service specifications.

b) Evidence of local arrangements to ensure that rheumatology services can access a musculoskeletal radiologist to perform and interpret imaging for people with suspected axial spondyloarthritis.

***Data source:*** Local data collection, for example from service specifications.

c) Evidence of an inflammatory back pain protocol outlining how to perform MRI on adults with suspected axial spondyloarthritis.

***Data source:*** Local data collection, for example from service protocols.

**Process**

a) Proportion of adults with suspected axial spondyloarthritis and an X-ray that does not show sacroiliitis meeting the modified New York criteria that have an MRI.

Numerator – the number in the denominator that have an MRI.

Denominator – the number of adults with suspected axial spondyloarthritis who have had an X‑ray that does not show sacroiliitis meeting the modified New York criteria.

***Data source:*** Local data collection, for example local audit of patient records.

b) Proportion of MRIs for suspected axial spondyloarthritis in adults performed using an inflammatory back pain protocol.

Numerator – the number in the denominator where the MRI was performed using an inflammatory back pain protocol.

Denominator – the number of MRIs performed to investigate suspected axial spondyloarthritis in adults.

***Data source:*** Local data collection, for example local audit of patient records.

**Outcome**

a) Time from first presentation of symptoms to diagnosis for adults with axial spondyloarthritis.

***Data source:*** Local data collection, for example local audit of patient records.

b) Health related quality of life score of adults with axial spondyloarthritis.

***Data source:*** Local data collection, for example survey of adults with axial spondyloarthritis using a quality of life questionnaire.

c) Functional ability score of adults with axial spondyloarthritis.

***Data source:*** Local data collection, for example survey of adults with axial spondyloarthritis using a questionnaire to assess functional ability (such as the Bath Ankylosing Spondylitis Functional Index).

### *What the quality statement means for different audiences*

**Service providers** (such as rheumatology and diagnostic imaging services) have protocols to ensure that X-ray is the first-line imaging for people with suspected axial spondyloarthritis, and only when sacroiliitis meeting modified New York criteria is not detected on X-ray do people receive MRI. They ensure that MRI for suspected axial spondyloarthritis is performed using an inflammatory back pain protocol.

**Healthcare professionals** (such as rheumatologists and clinicians in musculoskeletal interface services) request X-ray as the first-line imaging for suspected axial spondyloarthritis unless a person is likely to have an immature skeleton. They request MRI using an inflammatory back pain protocol if an X-ray has been performed and does not show sacroiliitis meeting modified New York criteria. Rheumatologists and radiologists use the Assessment of Spondyloarthritis International Society/Outcome Measures in Rheumatology MRI criteria to interpret the MRI.

**Commissioners** (clinical commissioning groups) have service specifications that require MRI using an inflammatory back pain protocol to be performed for people with suspected axial spondyloarthritis when an X-ray has not detected sacroiliitis meeting modified New York criteria.

**Adults suspected of having axial spondyloarthritis** are offered an MRI to check for inflammation if an X‑ray of their back and pelvis has not shown that they have the condition. Although X-rays can detect ankylosing spondylitis (a type of arthritis that affects the spine), MRIs can often show if someone has a different type of axial spondyloarthritis.

### *Source guidance*

Spondyloarthritis in over 16s: diagnosis and management (2017) NICE guideline NG65, recommendation 1.2.6

## *Definitions of terms used in this quality statement*

**Sacroiliitis**

Inflammation of the sacroiliac joint at the base of the spine that meets the modified New York criteria (bilateral grade 2–4 or unilateral grade 3–4 sacroiliitis). [NICE's guideline on spondyloarthritis, glossary in the full guideline and recommendation 1.2.6]

**Inflammatory back pain MRI**

An MRI performed using short T1 inversion recovery (STIR) and T1 weighted sequences of the whole spine (sagittal view), and sacroiliac joints (coronal oblique view). [NICE's guideline on spondyloarthritis, recommendation 1.2.7]

## *Equality and diversity considerations*

There is a common misconception that axial spondyloarthritis is predominantly a condition that affects men. Healthcare professionals should be aware that axial spondyloarthritis affects a similar number of women as men. Women are considered to be less likely to show sacroiliitis on X-ray compared with men, but there is no gender-based consideration when requesting an X-ray. If a person does not receive an X-ray they cannot be diagnosed with radiographic axial spondyloarthritis and therefore may not receive appropriate treatment for that indication.

Young people (around 16–18 years of age) with an immature skeleton would be unlikely to show radiographic signs and therefore an X-ray would be inappropriate at initial presentation. It is likely that people in this group would receive an X-ray at a later stage in disease management.

# Quality statement 3: Physiotherapy

## *Quality statement*

Adults with axial spondyloarthritis are referred to a specialist physiotherapist for a structured exercise programme.

## *Rationale*

Specialist physiotherapy is a key non-pharmacological management strategy for people with axial spondyloarthritis. Tailored, structured exercise programmes designed by specialist physiotherapists for people with axial spondyloarthritis can have many benefits. These include helping to reduce the impact of the disease; improving or maintaining mobility, function and quality of life; and reducing pain and fatigue.

## *Quality measures*

### Structure

Evidence of local referral pathways to specialist physiotherapists for treatment of adults with axial spondyloarthritis.

***Data source:*** Local data collection, for example from referral pathways or referral strategies.

### Process

Proportion of adults diagnosed with axial spondyloarthritis referred to a specialist physiotherapist for a structured exercise programme.

Numerator – the number in the denominator referred to a specialist physiotherapist for a structured exercise programme.

Denominator – the number of adults diagnosed with axial spondyloarthritis.

***Data source:*** Local data collection, for example local audit of patient records.

### Outcome

a) Functional ability score of adults with axial spondyloarthritis.

***Data source:*** Local data collection, for example survey of adults with axial spondyloarthritis using a questionnaire to assess functional ability (such as the Bath Ankylosing Spondylitis Functional Index).

b) Self-reported pain score of adults with axial spondyloarthritis.

***Data source:*** Local data collection, for example survey of adults with axial spondyloarthritis using a questionnaire to assess pain (such as the Bath Ankylosing Spondylitis Disease Activity Index).

c) Self-reported fatigue score of adults with axial spondyloarthritis.

***Data source:*** Local data collection, for example survey of adults with axial spondyloarthritis using a questionnaire to assess fatigue (such as the Bath Ankylosing Spondylitis Disease Activity Index).

d) Spinal mobility score of adults with axial spondyloarthritis.

***Data source:*** Local data collection, for example from measurements taken in clinical examinations to populate a validated tool (such as the Bath Ankylosing Spondylitis Metrology Index).

### *What the quality statement means for different audiences*

**Service providers** (such as GP practices and rheumatology services) ensure that referral pathways are in place for adults with axial spondyloarthritis to be referred to a specialist physiotherapist.

**Healthcare professionals** (such as rheumatologists and GPs) refer adults diagnosed with axial spondyloarthritis to a specialist physiotherapist.

**Commissioners** (clinical commissioning groups) have service specifications for physiotherapy that ensure that adults with axial spondyloarthritis are referred to a specialist physiotherapist for a structured exercise programme.

**Adults diagnosed with axial spondyloarthritis** are referred to a specialist physiotherapist. A physiotherapist is a medically trained person who can help with joint, muscle and movement problems. They will help create a tailored exercise plan

that can ease symptoms such as stiffness and pain, and help with mobility and fitness.

### Source guidance

Spondyloarthritis in over 16s: diagnosis and management (2017) NICE guideline NG65, recommendation 1.5.1

### Definitions of terms used in this quality statement

#### Structured exercise programme

A plan of exercises tailored to a person's particular needs that includes:

- stretching, strengthening and postural exercises
- deep breathing
- spinal extension
- range of motion exercises for the lumbar, thoracic and cervical sections of the spine
- aerobic exercise.

[NICE's guideline on spondyloarthritis, recommendation 1.5.1]

#### Specialist physiotherapist

A physiotherapist with rheumatology experience and experience of treating people with axial spondyloarthritis [expert opinion].

# Quality statement 4: Access to care during flares

## *Quality statement*

Adults with spondyloarthritis and a flare management plan are given information on how to access care during flares.

## *Rationale*

People with spondyloarthritis may have times when their symptoms get worse. These are called flares. People can experience flares in different ways with a variety of symptoms. Some people may be able to self-manage with extra advice, some may need their doses of medicines changing, and others may need access to a rheumatology team. Knowing how to access care and who to contact when experiencing a flare can help people to get advice and support and manage the flare quickly to prevent further disease progression or complication, and return to normal activities.

## *Quality measures*

### Structure

Evidence of local arrangements for healthcare professionals to give information to adults with spondyloarthritis and a flare management plan on how to access care during flares.

***Data source:*** Local data collection, for example from service specifications.

### Process

Proportion of adults with spondyloarthritis and a flare management plan who are given information on how to access care during flares.

Numerator – the number in the denominator who are given information on how to access care during flares.

Denominator – the number of adults with spondyloarthritis and a flare management plan.

***Data source:*** Local data collection, for example local audit of patient records.

**Outcome**

a) Satisfaction with the information provided on how to access care when experiencing a flare for adults with spondyloarthritis.

***Data source:*** Local data collection, for example survey of adults with spondyloarthritis who have experienced flares.

b) Length of time between adults with spondyloarthritis experiencing a flare and an intervention to manage the flare.

***Data source:*** Local data collection, for example survey of adults with spondyloarthritis who have experienced flares.

c) Emergency attendances and unplanned hospital admissions for adults with spondyloarthritis experiencing a flare.

***Data source:*** Local data collection, for example Hospital episode statistics from NHS Digital.

## *What the quality statement means for different audiences*

**Service providers** (rheumatology services) provide information to adults with spondyloarthritis and a flare management plan on how to access care during flares, including details of a named person to contact, for example, a specialist rheumatology nurse. They have systems in place to ensure that people having flares can access care quickly in different settings.

**Healthcare professionals** (rheumatologists and specialist rheumatology nurses) discuss flares with adults with spondyloarthritis and a flare management plan, covering how to access care when experiencing one and who to contact to get help.

**Commissioners** (clinical commissioning groups) commission services that have the capacity and resources to provide adults with spondyloarthritis and a flare management plan with information on how to access care during a flare.

**Adults with spondyloarthritis who have a plan for when their symptoms get worse** are given information about where to get care during these symptoms, including who to contact.

### *Source guidance*

Spondyloarthritis in over 16s: diagnosis and management (2017) NICE guideline NG65, recommendation1.3.5

### *Definitions of terms used in this quality statement*

#### Flares

Acute exacerbation of symptoms or disease activity above the level usually experienced. [NICE's guideline on spondyloarthritis, glossary in the full guideline]

#### Information on how to access care during flares

Information on services available, how to access them and details of a named person to contact, for example, a specialist rheumatology nurse. [Adapted from NICE's guideline on spondyloarthritis, recommendation 1.3.5]

## About this quality standard

NICE quality standards describe high-priority areas for quality improvement in a defined care or service area. Each standard consists of a prioritised set of specific, concise and measurable statements. NICE quality standards draw on existing NICE or NICE-accredited guidance that provides an underpinning, comprehensive set of recommendations, and are designed to support the measurement of improvement.

Expected levels of achievement for quality measures are not specified. Quality standards are intended to drive up the quality of care, and so achievement levels of 100% should be aspired to (or 0% if the quality statement states that something should not be done). However, this may not always be appropriate in practice. Taking account of safety, shared decision-making, choice and professional judgement, desired levels of achievement should be defined locally.

Information about how NICE quality standards are developed is available from the NICE website.

See quality standard advisory committees on the website for details of standing committee 3 members who advised on this quality standard. Information about the topic experts invited to join the standing members is available on the quality standard's webpage.

This quality standard has been included in the NICE Pathway on spondyloarthritis, which brings together everything we have said on spondyloarthritis in an interactive flowchart.

NICE has produced a quality standard service improvement template to help providers make an initial assessment of their service compared with a selection of quality statements. This tool is updated monthly to include new quality standards.

NICE produces guidance, standards and information on commissioning and providing high-quality healthcare, social care, and public health services. We have agreements to provide certain NICE services to Wales, Scotland and Northern Ireland. Decisions on how NICE guidance and other products apply in those countries are made by ministers in the Welsh government, Scottish government, and

Northern Ireland Executive. NICE guidance or other products may include references to organisations or people responsible for commissioning or providing care that may be relevant only to England.

### *Improving outcomes*

This quality standard is expected to contribute to improvements in the following outcomes:

- Functional capacity
- Mobility
- Ability to work
- Health-related quality of life
- Pain
- Fatigue
- Disease activity.

It is also expected to support delivery of the Department of Health's outcome frameworks:

- Adult social care outcomes framework 2016–17
- NHS outcomes framework 2016–17
- Public health outcomes framework for England, 2016–19.

### *Resource impact*

NICE quality standards should be achievable by local services. The potential resource impact is considered by the quality standards advisory committee, drawing on resource impact work for the source guidance. Organisations are encouraged to use the resource impact report and resource impact template for the source guidance to help estimate local costs.

### *Diversity, equality and language*

During the development of this quality standard, equality issues were considered and equality assessments are available. Any specific issues identified during development of the quality statements are highlighted in each statement.

Commissioners and providers should aim to achieve the quality standard in their local context, in light of their duties to have due regard to the need to eliminate unlawful discrimination, advance equality of opportunity and foster good relations. Nothing in this quality standard should be interpreted in a way that would be inconsistent with compliance with those duties.

ISBN: