

# Spinal metastases and metastatic spinal cord compression

Quality standard

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[www.nice.org.uk/guidance/qs56](https://www.nice.org.uk/guidance/qs56)

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This standard is based on NG234.

This standard should be read in conjunction with QS12, QS15, QS54 and QS124.

## Quality statements

Statement 1 This statement has been removed. For more details, see [update information](#).

Statement 2 Adults with spinal pain suggestive of spinal metastases, but with no neurological symptoms or signs, have an MRI of the whole spine and any necessary treatment plan agreed within 1 week of the suspected diagnosis.

Statement 3 Adults with suspected metastatic spinal cord compression (MSCC) who present with neurological symptoms or signs have an MRI of the whole spine within 24 hours of the suspected diagnosis.

Statement 4 Adults with suspected MSCC who present with neurological symptoms or signs have their diagnostic investigations coordinated by an MSCC coordinator.

Statement 5 Adults with MSCC have their ongoing care coordinated by an MSCC coordinator.

Statement 6 Adults with MSCC that is not suitable for surgery start radiotherapy within 24 hours of the decision to treat (if appropriate).

Statement 7 Adults with MSCC have a management plan that includes an assessment of ongoing care and rehabilitation needs.

## Quality statement 1: Information about recognising the symptoms of metastatic spinal cord compression

This statement has been removed. For more details, see [update information](#).

# Quality statement 2: Imaging and treatment plans for adults with suspected spinal metastases

## Quality statement

Adults with spinal pain suggestive of spinal metastases, but with no neurological symptoms or signs, have an MRI of the whole spine and any necessary treatment plan agreed within 1 week of the suspected diagnosis.

## Rationale

Adults with spinal pain suggestive of spinal metastases need timely access to imaging that will accurately identify spinal metastases. Whole-spine MRI is central to the diagnosis, staging and planning of treatment. If spinal metastases are suspected, it is essential that investigation, planning and treatment take place before any loss of neurological function occurs. To reduce the risk of avoidable disability for adults with suspected spinal metastases, it is important that an MRI is performed and that treatment is planned by a senior clinician from the multidisciplinary team within 1 week of the suspected diagnosis.

## Quality measures

The following measures can be used to assess the quality of care or service provision specified in the statement. They are examples of how the statement can be measured, and can be adapted and used flexibly.

## Process

a) Proportion of adults with spinal pain suggestive of spinal metastases, but with no neurological symptoms or signs, who receive an MRI of the whole spine within 1 week of the suspected diagnosis.

Numerator – the number of adults in the denominator who receive an MRI of the whole

spine within 1 week of presenting with spinal pain suggestive of spinal metastases, but with no neurological symptoms or signs.

Denominator – the number of adults who present with spinal pain suggestive of spinal metastases, but with no neurological symptoms or signs.

**Data source:** Data can be collected from information recorded locally by healthcare professionals and provider organisations, for example from patient records.

b) Proportion of adults with spinal metastases confirmed by MRI of the whole spine, but with no neurological symptoms or signs, who have a treatment plan agreed within 1 week of the suspected diagnosis.

Numerator – the number of adults in the denominator who have a treatment plan agreed within 1 week of presenting with spinal pain suggestive of spinal metastases, but with no neurological symptoms or signs.

Denominator – the number of adults with spinal metastases confirmed by MRI of the whole spine, but with no neurological symptoms or signs.

**Data source:** Data can be collected from information recorded locally by healthcare professionals and provider organisations, for example from patient records.

## What the quality statement means for different audiences

**Service providers** ensure that adequate capacity is available for whole-spine MRI scanning and treatment planning to be undertaken within 1 week for adults with suspected spinal metastases who present with spinal pain but with no neurological symptoms or signs.

**Healthcare professionals** ensure that they perform an MRI of the whole spine for adults with suspected spinal metastases who present with spinal pain but with no neurological symptoms or signs, and agree any necessary treatment plan within 1 week of the suspected diagnosis.

**Commissioners** ensure that they commission services that can provide MRI scanning and

treatment planning by a senior clinician from the multidisciplinary team within 1 week of the suspected diagnosis of spinal metastases for adults who have spinal pain but no neurological symptoms or signs.

**Adults with suspected spinal metastases (who have spinal pain only)** have an MRI of their whole spine and, if necessary, have a plan for their treatment organised within 1 week of the suspected diagnosis.

## Source guidance

Spinal metastases and metastatic spinal cord compression. NICE guideline NG234 (2023), recommendations 1.1.17, 1.3.3, 1.5.3, 1.5.5 and box 1

## Definitions of terms used in this quality statement

### Pain characteristics suggestive of spinal metastases

The following symptoms are suggestive of spinal metastases:

- severe unremitting back pain
- progressive back pain
- mechanical pain (aggravated by standing, sitting or moving)
- back pain aggravated by straining (for example, coughing, sneezing or bowel movements)
- night-time back pain disturbing sleep
- localised tenderness
- claudication (muscle pain or cramping in the legs when walking or exercising).

[Adapted from NICE's guideline on spinal metastases and metastatic spinal cord compression, box 1]



# Quality statement 3: Imaging for adults with suspected metastatic spinal cord compression

## Quality statement

Adults with suspected metastatic spinal cord compression (MSCC) who present with neurological symptoms or signs have an MRI of the whole spine within 24 hours of the suspected diagnosis.

## Rationale

Adults with suspected MSCC who present with neurological symptoms or signs need rapid access to imaging that will accurately identify spinal cord compression. MRI of the whole spine is central to the diagnosis, staging and planning of treatment. Neurological deficit at initial presentation is an important predictor of long-term functional outcome. To reduce the risk of avoidable disability for adults with suspected MSCC, it is important that an MRI of the whole spine is performed within 24 hours of the suspected diagnosis.

## Quality measures

The following measures can be used to assess the quality of care or service provision specified in the statement. They are examples of how the statement can be measured, and can be adapted and used flexibly.

## Process

Proportion of adults with suspected MSCC who present with neurological symptoms or signs who receive an MRI of the whole spine within 24 hours of the suspected diagnosis.

Numerator – the number of adults in the denominator who receive an MRI of the whole spine within 24 hours of presenting with suspected MSCC and neurological symptoms or signs.

Denominator – the number of adults with suspected MSCC who present with neurological symptoms or signs.

**Data source:** Data can be collected from information recorded locally by healthcare professionals and provider organisations, for example from patient records.

## What the quality statement means for different audiences

**Service providers** ensure that adequate capacity is available for whole-spine MRI scanning to be undertaken within 24 hours for adults with suspected MSCC who present with neurological symptoms or signs.

**Healthcare professionals** ensure that they perform an MRI of the whole spine for adults with suspected MSCC who present with neurological symptoms or signs.

**Commissioners** ensure that they commission services that can provide MRI scanning within 24 hours of the suspected diagnosis for adults with suspected MSCC who present with neurological symptoms or signs.

**Adults with suspected MSCC** have an MRI of their whole spine within 24 hours of the suspected diagnosis.

## Source guidance

Spinal metastases and metastatic spinal cord compression. NICE guideline NG234 (2023), recommendations 1.1.19, 1.5.2, 1.5.5 and box 1.

## Definitions of terms used in this quality statement

### Symptoms or signs suggestive of MSCC

The following pain characteristics are suggestive of spinal metastases:

- severe unremitting back pain

- progressive back pain
- mechanical pain (aggravated by standing, sitting or moving)
- back pain aggravated by straining (for example, coughing, sneezing or bowel movements)
- night-time back pain disturbing sleep
- localised tenderness
- claudication (muscle pain or cramping in the legs when walking or exercising).

The following pain characteristics are suggestive of cord compression:

- bladder or bowel dysfunction
- gait disturbance or difficulty walking
- limb weakness
- neurological signs of spinal cord or cauda equina compression
- numbness, paraesthesia or sensory loss
- radicular pain.

[Adapted from NICE's guideline on spinal metastases and metastatic spinal cord compression, box 1]

# Quality statement 4: Coordinating investigations for adults with suspected metastatic spinal cord compression

## Quality statement

Adults with suspected metastatic spinal cord compression (MSCC) who present with neurological symptoms or signs have their diagnostic investigations coordinated by an MSCC coordinator.

## Rationale

Some adults with cancer who have a high risk of developing bone metastases are at high risk of developing MSCC. When people present with suspected MSCC, it is important that diagnostic investigations are undertaken promptly. The principal role of the MSCC coordinator for adults with suspected MSCC is to liaise with healthcare professionals and ensure that investigations are organised and undertaken without delay. For those with neurological symptoms or signs it is particularly important that an MSCC coordinator is available at all times to ensure that initial management for adults with MSCC is both comprehensive and timely.

## Quality measures

The following measures can be used to assess the quality of care or service provision specified in the statement. They are examples of how the statement can be measured, and can be adapted and used flexibly.

## Process

Proportion of adults with suspected MSCC who present with neurological symptoms or signs who have an assessment of their requirement for, and urgency of, investigations undertaken by an MSCC coordinator.

**Numerator** – the number of adults in the denominator who have an assessment of their requirement for, and urgency of, investigations undertaken by an MSCC coordinator.

**Denominator** – the number of adults with suspected MSCC who present with neurological symptoms or signs.

**Data source:** Data can be collected from information recorded locally by healthcare professionals and provider organisations, for example from patient records.

## What the quality statement means for different audiences

**Service providers** ensure that an MSCC coordinator is available at all times to coordinate the diagnostic investigations for adults with suspected MSCC who present with neurological symptoms or signs.

**Healthcare professionals** ensure that adults with suspected MSCC who present with neurological symptoms or signs have their diagnostic investigations organised by the MSCC coordinator.

**Commissioners** ensure that they commission services that provide access to an MSCC coordinator, available at all times, to coordinate diagnostic investigations for adults with suspected MSCC who are referred from primary or secondary care.

**Adults with suspected MSCC who have neurological symptoms or signs** have their tests and investigations arranged by a coordinator.

## Source guidance

Spinal metastases and metastatic spinal cord compression. NICE guideline NG234 (2023), recommendations 1.1.15, 1.1.16 and 1.3.4

## Definitions of terms used in this quality statement

### MSCC coordinator

The MSCC coordinator ensures that:

- key information about each person is recorded; this includes information on:
  - clinical presentation
  - neurological assessment
  - performance status
  - frailty assessment
  - investigations, including imaging reports
  - oncology assessment and disease staging
  - individual needs, preferences and circumstances (for example, language and communication needs)
- initial triage of information about the person's care is performed
- appropriate information is shared with primary care and with the multidisciplinary team
- discharge planning is coordinated.

They provide initial advice to referring healthcare professionals on:

- pain management
- spinal stability
- immobilisation
- the use of dexamethasone
- referral and transfer for specialist treatment.

An MSCC coordinator should be available 24 hours a day, 7 days a week, acting as a single point of contact for healthcare professionals. [Adapted from [NICE's guideline on spinal](#)

metastases and metastatic spinal cord compression, recommendations 1.1.7, 1.1.15 and 1.1.16]

## Symptoms and signs suggestive of MSCC

The following pain characteristics are suggestive of spinal metastases:

- severe unremitting back pain
- progressive back pain
- mechanical pain (aggravated by standing, sitting or moving)
- back pain aggravated by straining (for example, coughing, sneezing or bowel movements)
- night-time back pain disturbing sleep
- localised tenderness
- claudication (muscle pain or cramping in the legs when walking or exercising).

The following pain characteristics are suggestive of cord compression:

- bladder or bowel dysfunction
- gait disturbance or difficulty walking
- limb weakness
- neurological signs of spinal cord or cauda equina compression
- numbness, paraesthesia or sensory loss
- radicular pain.

[Adapted from NICE's guideline on spinal metastases and metastatic spinal cord compression, box 1]

# Quality statement 5: Coordinating care for adults with metastatic spinal cord compression

## Quality statement

Adults with metastatic spinal cord compression (MSCC) have their ongoing care coordinated by an MSCC coordinator.

## Rationale

The care and treatment of adults with MSCC may involve a number of specialties, including oncology, surgery and radiology. It is important that the ongoing investigations and treatments are undertaken promptly because early intervention has a positive effect on MSCC outcomes. The principal role of the MSCC coordinator for adults with MSCC is to liaise with the relevant specialists and organise treatment and any ongoing investigations, ensuring that the ongoing care of adults with MSCC is both comprehensive and timely.

## Quality measures

The following measures can be used to assess the quality of care or service provision specified in the statement. They are examples of how the statement can be measured, and can be adapted and used flexibly.

## Process

Proportion of adults with MSCC whose ongoing care is coordinated by an MSCC coordinator.

Numerator – the number of adults in the denominator whose ongoing care is coordinated by an MSCC coordinator.

Denominator – the number of adults with MSCC.



**Data source:** Data can be collected from information recorded locally by healthcare professionals and provider organisations, for example from patient records.

## What the quality statement means for different audiences

**Service providers** ensure that an MSCC coordinator is available to coordinate the ongoing care for adults with MSCC.

**Healthcare professionals** ensure that they arrange access to the MSCC coordinator who will coordinate the ongoing care for adults with MSCC.

**Commissioners** ensure that they commission services that provide access to an MSCC coordinator who will coordinate the ongoing care for adults with MSCC.

**Adults with MSCC** have their treatment organised by a coordinator who will oversee important aspects of care on their behalf.

## Source guidance

Spinal metastases and metastatic spinal cord compression. NICE guideline NG234 (2023), recommendation 1.1.15

## Definitions of terms used in this quality statement

### MSCC coordinator

The MSCC coordinator ensures that:

- key information about each person is recorded; this includes information on:
  - clinical presentation
  - neurological assessment
  - performance status

- frailty assessment
  - investigations, including imaging reports
  - oncology assessment and disease staging
  - individual needs, preferences and circumstances (for example, language and communication needs)
- initial triage of information about the person's care is performed
  - appropriate information is shared with primary care and with the multidisciplinary team
  - discharge planning is coordinated.

They provide initial advice to referring healthcare professionals on:

- pain management
- spinal stability
- immobilisation
- the use of dexamethasone
- referral and transfer for specialist treatment.

An MSCC coordinator should be available 24 hours a day, 7 days a week, acting as a single point of contact for healthcare professionals. [Adapted from [NICE's guideline on spinal metastases and metastatic spinal cord compression](#), recommendations 1.1.7, 1.1.15 and 1.1.16]

# Quality statement 6: Radiotherapy for metastatic spinal cord compression

## Quality statement

Adults with MSCC that is not suitable for surgery start radiotherapy within 24 hours of the decision to treat (if appropriate).

## Rationale

Treatment while patients are still able to move or walk around is effective in maintaining their ability to walk and functional independence. Delay in treatment may have irreversible consequences, such as loss of motor and bladder functions. Starting radiotherapy as a matter of urgency is important for adults with MSCC because it can help to prevent further neurological deterioration, which may lead to complete tetraplegia or paraplegia. People who develop complete tetraplegia or paraplegia have a significantly impaired quality of life and shortened survival, so it is important to identify possible ways of preventing or improving the outcome of MSCC.

## Quality measures

The following measures can be used to assess the quality of care or service provision specified in the statement. They are examples of how the statement can be measured, and can be adapted and used flexibly.

## Process

Proportion of adults with MSCC that is not suitable for surgery who start radiotherapy within 24 hours of the decision to treat (if appropriate).

Numerator – the number of adults in the denominator who start radiotherapy within 24 hours of the decision to treat.

Denominator – the number of adults with MSCC that is not suitable for surgery for whom

radiotherapy is appropriate.

**Data source:** Data can be collected from information recorded locally by healthcare professionals and provider organisations, for example from patient records.

## What the quality statement means for different audiences

**Service providers** ensure that for adults with MSCC that is not suitable for surgery there are local protocols in place to enable healthcare professionals to start radiotherapy (if appropriate) within 24 hours of the decision to treat.

**Healthcare professionals** ensure that adults with MSCC that is not suitable for surgery start radiotherapy (if appropriate) within 24 hours of the decision to treat.

**Commissioners** ensure that for adults with MSCC that is not suitable for surgery they commission services that can start radiotherapy (if appropriate) within 24 hours of the decision to treat.

**Adults with MSCC for whom surgery is not appropriate** start radiotherapy if it is suitable for them within 24 hours of the decision to start radiotherapy.

## Source guidance

Spinal metastases and metastatic spinal cord compression. NICE guideline NG234 (2023), recommendations 1.1.21 and 1.10.4

## Definitions of terms used in this quality statement

### Adults with MSCC that is not suitable for surgery for whom radiotherapy is appropriate

Adults with MSCC that is not suitable for surgery start radiotherapy, if they wish to do so, within 24 hours unless they have had complete tetraplegia or paraplegia for 2 weeks or longer and their pain is well controlled, or their overall prognosis is poor. [Adapted from NICE's guideline on spinal metastases and metastatic spinal cord compression,

recommendation 1.10.4]

## Equality and diversity considerations

Survival times for adults with MSCC vary from just a few weeks to over a decade. The person's age should not affect the decision to undertake definitive treatment.

# Quality statement 7: Supportive care and rehabilitation

## Quality statement

Adults with metastatic spinal cord compression (MSCC) have a management plan that includes an assessment of ongoing care and rehabilitation needs.

## Rationale

It is important that personalised management planning for adults with MSCC starts on admission because rehabilitation and supportive care are integral to the promotion of independence and quality of life for adults with MSCC. Emphasis should be on an individualised, person-centred management planning process, led by a key worker, which takes into account care relating to all existing healthcare issues the person may have, including cancer. Communication between secondary, primary and tertiary care needs to ensure a seamless transfer between services and continuity of care for patients.

## Quality measures

The following measures can be used to assess the quality of care or service provision specified in the statement. They are examples of how the statement can be measured, and can be adapted and used flexibly.

## Process

Proportion of adults with MSCC who are discharged from hospital with a management plan that includes an assessment of ongoing care and rehabilitation needs.

Numerator – the number of adults in the denominator who have a management plan on discharge.

Denominator – the number of adults with MSCC who are discharged from hospital.

**Data source:** Data can be collected from information recorded locally by healthcare professionals and provider organisations, for example from patient records.

## What the quality statement means for different audiences

**Service providers** ensure that staff are trained on how to develop management plans, including how to undertake an assessment of ongoing care and rehabilitation needs for adults with MSCC, and have protocols in place for starting management planning on admission.

**Healthcare professionals** involve adults with MSCC in developing management plans, which include an assessment of ongoing care and rehabilitation needs, when they are admitted to hospital.

**Commissioners** ensure that they commission services that train their staff on how to develop management plans, including how to undertake an assessment of ongoing care and rehabilitation needs for adults with MSCC, and have protocols in place for starting management planning on admission.

**Adults with MSCC** have a plan of the ongoing care they agree to receive after they have been discharged from hospital, which will include plans for rehabilitation.

## Source guidance

Spinal metastases and metastatic spinal cord compression. NICE guideline NG234 (2023), recommendations 1.12.1 to 1.12.3

## Definitions of terms used in this quality statement

### Management planning and ongoing care

For adults with MSCC, this should start at diagnosis. Rehabilitation should be focussed on the person's priorities and goals. These could include:

- improving functional independence

- participation in activities of daily life
- improving quality of life.

[Adapted from [NICE's guideline on spinal metastases and metastatic spinal cord compression](#), recommendation 1.12.2]

## Equality and diversity considerations

Survival times for adults with MSCC vary from just a few weeks to over a decade. MSCC is closely associated with the end of life because of its high incidence in the late stages of advanced malignancy. The timing of discussions about ongoing care and rehabilitation should be sensitive to the emotional adjustments that the patient and carer may be experiencing.

The person's age should not affect the content of the discharge plan or their access to rehabilitation services. Healthcare professionals should consider whether adults with MSCC who are experiencing the later stages of cancer may benefit more from readjustment rather than rehabilitation.



## Update information

**September 2023:** Changes have been made to align this quality standard with the updated [NICE guideline on spinal metastases and metastatic spinal cord compression](#). Statement 1 on information about recognising the symptoms of metastatic spinal cord compression for adults at high risk of developing metastatic spinal cord compression has been removed because it is no longer supported by the guideline recommendations. Statements 3 and 6 have been updated to reflect changes to the guidance on imaging and treatment. Links, definitions and source guidance sections have also been updated throughout. We have also updated the name of this quality standard.

The [previous version of the quality standard for metastatic spinal cord compression in adults](#) is available as a pdf.

## 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 our [webpage on quality standards advisory committees](#) for details about our standing committees. Information about the topic experts invited to join the standing members is available from the [webpage for this quality standard](#).

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 guidance and quality standards apply in England and Wales. Decisions on how they apply in Scotland and Northern Ireland are made by the Scottish government and Northern Ireland Executive. NICE quality standards may include references to organisations or people responsible for commissioning or providing care that may be relevant only to England.

## 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 products for the NICE guideline on spinal metastases and metastatic spinal cord compression](#) to help estimate local costs.

## Diversity, equality and language

Equality issues were considered during development and [equality assessments for this quality standard](#) 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.

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## Endorsing organisation

This quality standard has been endorsed by NHS England, as required by the Health and Social Care Act (2012)

## Supporting organisations

Many organisations share NICE's commitment to quality improvement using evidence-based guidance. The following supporting organisations have recognised the benefit of the quality standard in improving care for patients, carers, service users and members of the public. They have agreed to work with NICE to ensure that those commissioning or providing services are made aware of and encouraged to use the quality standard.

- [Royal College of General Practitioners \(RCGP\)](#)
- [Royal College of Nursing \(RCN\)](#)
- [Society and College of Radiographers \(SOR\)](#)