5.9. Low Back Pain and Sciatica

Background

Low back pain and sciatica are recurrent conditions. 11% of men and 16% of women have chronic low back pain, and 30% of people still have clinically significant symptoms after a year after onset of sciatica. Back pain accounts for 7% of GP consultations and results in the loss of 4.1 million working days a year.

Most patients seen in primary care do not have serious underlying pathology. The NICE guideline (NGS9, 2016) advises clinicians to assess the clinical likelihood of serious underlying pathology at every review, and refer for appropriate investigation and management (see infographic https://www.bmj.com/content/356/bmj.i6748/infographic). In some cases it may be appropriate to investigate and manage in primary care e.g. patients in last phase of life.

Causes of Low Back Pain in Primary Care

<table>
<thead>
<tr>
<th>Low back pain without serious underlying pathology</th>
<th>85%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compression fractures</td>
<td>4%</td>
</tr>
<tr>
<td>Tumour</td>
<td>1%</td>
</tr>
<tr>
<td>Prolapsed intervertebral disc</td>
<td>1-3%</td>
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<tr>
<td>Ankylosing spondylitis, Spinal infections, Intra-abdominal pathology</td>
<td>&lt; 1% each</td>
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</tbody>
</table>

Less than 1% of patients presenting in primary care will require surgery or injections. NICE does not recommend surgery or injections for back pain in the absence of structural pathology or nerve root involvement. Acupuncture is decommissioned in community and hospital care in NW London.

Definitions

Low back pain that is not associated with serious or potentially serious causes has been described in the literature as 'non-specific', 'mechanical', 'musculoskeletal' or 'simple' low back pain. For consistency, NICE used the term 'low back pain' throughout the guideline. Specific causes of low back pain include sciatica, vertebral fracture, intra-abdominal pathologies, and more rarely, ankylosing spondylitis, cancer, and infection.

NICE used 'sciatica' to describe leg pain secondary to lumbosacral nerve root pathology rather than the terms 'radicular pain' or 'radiculopathy', although they are more accurate. This is because 'sciatica' is a term that patients and clinicians understand, and it is widely used in the literature to describe neuropathic leg pain secondary to compressive spinal pathology.

Serious underlying pathology

- Most single features in the history have poor predictive accuracy for serious underlying pathology.
- Single features that should raise suspicion
  - Cancer that can metastasise to bone (lung, breast, thyroid, kidney, prostate, myeloma).
  - Trauma that could cause a fracture.
  - Sphincter disturbance or perianal loss of sensation.
- Look at the whole clinical picture, considering additional past history and examination findings.
- Further investigation and referral are indicated if strong suspicion of serious underlying pathology.
Referral Criteria: Low Back Pain and Sciatica

Low back pain and sciatica: summary of NICE guidance

https://www.bmj.com/content/356/bmj.i6748/infographic
Referral to General Practitioner

(Referral from triage, community or hospital services specifically for primary care medical review)

**Inclusions**

- Assessment and management of multi-morbidity and psychiatric co-morbidity.
- Medication reviews and non-urgent prescriptions. Note, for disease-modifying drugs and immunosuppressants initiated in secondary care for spondyloarthritis, there must be an shared care protocol that has been agreed and accepted by both the primary and secondary care clinician responsible for an individual patient.
- Advice regarding achieving and maintaining optimal weight, nutrition, physical activity and healthy lifestyle, including smoking cessation advice.
- Discussion about fitness for work and sickness certification.
- Management following discharge from community or secondary care where no further intervention planned.
- Patients referred back from community services with known or suspected serious underlying pathology where non-urgent (for re-evaluation and possible referral to secondary care).

**Exclusions**

- Patients seen in community or secondary care settings who need emergency or urgent assessment e.g. suspected cauda equina syndrome, metastatic spinal cord compression, serious trauma
- Imaging for low back pain and sciatica except where there is no community musculoskeletal service commissioned or for investigation of serious underlying pathology where hospital assessment is not clinically indicated (e.g. X-ray for suspected osteoporotic vertebral fractures)
Referral to Community Physiotherapy or First Contact Physiotherapy in Primary Care

**Inclusions**

- Acute episode of low back pain or acute exacerbation (less than 3 months) of chronic low back pain. As a guide, consider a threshold for referral of less than 70% recovery after 2wks of supported self-management

- Recurrent low back pain where onset of less than 3 months for this episode AND the patient improved by more than 50% following previous physiotherapy AND where the improvement lasted more than 6 months

**Exclusions**

- Reasonable clinical suspicion of serious underlying pathology (red flags) including cancer, infection, trauma, severe and progressive neurology e.g. cauda equina syndrome. These patients will be referred back to GP for urgent assessment (same day).

- Very severe nerve root pain (e.g. where may need epidural for pain control and patient willing to consider a spinal injection, refer to interface service) unless in rehab phase (see NICE pathway [https://www.bmj.com/content/356/bmj.i6748/infographic](https://www.bmj.com/content/356/bmj.i6748/infographic)).

- Not been offered self-management advice, where clinically appropriate.

- A validated decision tool (e.g. STarT Back) or clinical assessment suggests the person is at high risk of poor functional outcome due to psychological and social factors, and a musculoskeletal interface service or community pain service has been commissioned. Psychosocial risk factors for poor functional outcome:
  - Psychological factors
    - low mood and anxiety.
    - strong belief that pain is harmful coupled with a fear of movement.
    - presenting with physical manifestations of psychological distress and life-trauma.
  - Social factors
    - financial uncertainty.
    - ongoing litigation and compensation claims.

**Community physiotherapy only exclusions**

- Presented with same condition within previous 12 months, and there was no substantive improvement with treatment previously, and if no other community treatment options are appropriate (e.g. pain service, where commissioned).

- Chronic widespread pain or inflammatory disorder (refer to rheumatology interface service if commissioned), unless a specialist service has identified a specific functional goal for physiotherapy (e.g. improving gait, improving balance and reducing falls, occupational rehabilitation).

- Patients with neurological problems including Stroke, MND, Parkinson’s disease and multiple sclerosis, where a neurological rehabilitation service is commissioned.

- Patients with frailty and high risk of falls, where a falls service is commissioned.

- Co-morbidities that significantly impair a particular patient’s ability to exercise. For example neurological (e.g. stroke), severe cardiac, renal, liver or respiratory failure, recurrent disabling hypoglycaemia or poorly controlled epilepsy.
Referral Criteria: Low Back Pain and Sciatica

(May not be available in every CCG)

**Inclusions**

- Low back pain and sciatica with lack of persistent benefit from exercise and manual therapies.
- Patients at high risk of poor functional outcome e.g. due to psychological and social factors (unless a community pain service offering a combined physical and psychological approach has been commissioned for these patients).
- Severe nerve root pain where the person is prepared to consider injections or surgery (check previous discharge letters for suitability).
- Structural pathology suspected or known, not requiring urgent evaluation (e.g. spondylolisthesis with back or leg pain, symptomatic scoliosis).
- Patient prepared to have an MRI (only where clinically indicated) following a shared decision making discussion guided by a decision aid tool:
  - Non-surgical treatment has not worked for them (including pain management programmes) **and**
  - The main source of pain is thought to come from structures supplied by the medial branch nerve(s) **and**
  - They have moderate or severe levels of localised back pain (rated as 5 or more on a visual analogue scale, or equivalent) at the time of referral.

**Exclusions**

- Reasonable clinical suspicion of serious underlying pathology (red flags) including cancer, infection, trauma, severe and progressive neurology e.g. cauda equina syndrome. These patients will be referred back to GP for urgent assessment (same day), or to A&E as clinically appropriate.
- Fractures, including osteoporotic fractures, unless the patient has been reviewed by a doctor (e.g. orthopaedic surgeon, musculoskeletal physician) and cleared for community treatment – see above.

If musculoskeletal physician services commissioned

- Assessment of undiagnosed pain, multi-morbidity and psychiatric co-morbidity.
- Advice on pharmacological management.
- Advice on diagnosis and management of osteoporosis and fragility fractures.
- Spondyloarthritis (refer to rheumatology interface service if commissioned), unless a specialist service has identified a specific functional goal for physiotherapy (e.g. improving gait, improving balance and reducing falls, occupational rehabilitation).

- Patients with neurological problems including Stroke, MND, Parkinson’s disease and multiple sclerosis, where a neurological rehabilitation service is commissioned.

- Patients with frailty and high risk of falls, where a falls service is commissioned.
Referral Criteria: Low Back Pain and Sciatica

Referral to Secondary Care Spinal Orthopaedic or Neurosurgery Service

**Inclusions**

- Investigation and management where reasonable clinical suspicion of serious underlying pathology requiring urgent assessment (within 2 weeks).
- Diagnostic uncertainty (particularly in the presence of structural pathology, and where a trial of conservative management has been unsuccessful or is not clinically indicated).
- Consideration of spinal decompression for nerve root pain, canal stenosis, benign and malignant tumours.
- Consideration of other procedures covered by NICE Interventionsal Procedures guidance where appropriate and cost-effective for use within the NHS for this person. (Review the old notes first).
- Consideration of vertebroplasty (n.b. limited evidence).
- Consideration of surgery for symptomatic structural pathology (e.g. spondylolisthesis).
- Patient prepared to have surgical intervention following a shared decision making discussion guided by a decision aid tool:
  - Surgery: Prolapsed Lumbar Disc
  - Surgery: Lumbar Spinal Stenosis:
- Any imaging (including MRI spine) performed in primary or community care should be available on IEP/receiving unit, and the reports forwarded with the referral. Any blood tests and pathology performed in primary or community care should be available on ICE/OpenNet and key results forwarded with the referral. Any previous relevant outpatient summary letters and imaging reports should be forwarded with the referral.

**Exclusions**

- Suspected metastatic cord compression, cauda equina syndrome, fracture or septic arthritis. (Refer to on-call neurosurgical or orthopaedic teams, or A&E).
- Suspicion of peripheral vascular disease (e.g. aortic aneurysm, limb ischaemia). (Discuss with on-call vascular team).
- Acute sciatica where conservative management, neuropathic agents or steroid epidurals are clinically appropriate but have not been tried. (Refer to MSk Interface service, where commissioned, or pain service for consideration of epidural).
- Suspected spondyloarthritis. (See ‘Inflammation of the Spine’ above).
- Patients who have not been triaged or referred from a community musculoskeletal service (including non-urgent internally generated referrals (consultant to consultant referrals).
- Exercise and manual therapies have not been tried where clinically appropriate.
- PPwT form has not been completed by referrer where request is for a procedure covered by the policy.
- Referral is not accompanied by any pre-requisite imaging or investigations required by the PPwT policy, consultant or unit.
Referral Criteria: Low Back Pain and Sciatica

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Referral to Community Pain Service offering a combined physical and psychological approach

(May not be available in every CCG)

**Inclusions**

- High risk of poor functional outcome or high levels of distress e.g. due to psychological and social factors where single modality treatments have been ineffective or not clinically appropriate.

- Low back pain, with or without sciatica, or widespread chronic pain where non-invasive treatments have not had at least a 30% improvement in pain or function, lasting at least 3-6 months beyond the end of treatment, and where previous assessment suggests that invasive treatments (injections, surgery) are not appropriate.

- Any imaging performed in primary or community care should be available on IEP/receiving unit, and the reports forwarded with the referral. Any blood tests and pathology performed in primary or community care should be available on ICE/OpenNet and key results forwarded with the referral. Any previous relevant outpatient summary letters and imaging reports should be forwarded with the referral.

If medical support available

- Step down from strong opioids and other pain medications in conjunction with support from a combined physical and psychological approach, where appropriate for a community setting.

**Exclusions**

- Reasonable clinical suspicion of serious underlying pathology (red flags) including cancer, infection, trauma, severe and progressive neurology e.g. cauda equina syndrome. These patients will be referred back to GP for urgent assessment (same day), or to A&E as clinically appropriate.

- Spondyloarthritis (refer to rheumatology interface service if commissioned), unless a specialist service has identified that a pain management approach should be considered.

- Patient does not accept a combined approach including a psychological approach to pain management.
Referral to Secondary Care Pain Service

*Inclusions*

- Acute sciatica of less than 3 months duration for consideration of an epidural (where patient prepared to consider spinal injections), where covered by the NW London CCGs Low Back Pain and Sciatica Policy.

- Assessment of undiagnosed pain, multi-morbidity and psychiatric co-morbidity, where a positive diagnosis has not been made in a primary or community care setting, or where the diagnosis is in doubt.

- Low back pain, with or without sciatica, or widespread chronic pain where community-based non-invasive treatments have not had at least a 30% improvement in pain or function, lasting at least 3-6 months beyond the end of treatment, and where the person is prepared to consider either a hospital-based physical and psychological approach, or injections (where covered by the NW London CCGs Low Back Pain and Sciatica Policy, above.

- Consideration of other procedures covered by NICE Interventional Procedures guidance where appropriate and cost-effective for use within the NHS for this person. (Review the old notes first).

- Low back pain, with or without sciatica, or widespread chronic pain for advice on pharmacological management, including stepping down medication where this cannot be managed in primary care.

- Patient prepared to have intervention following a shared decision making discussion guided by a decision aid tool:


  1. NWL CCGs do NOT commission the following for low back pain and non-radicular spinal pain:
     a. Facet joint injections
     b. Therapeutic medial branch blocks
     c. Intradiscal therapy
     d. Prololotherapy
     e. Trigger point injections with any agent, including botulinum toxin
     f. Epidural steroid injections for chronic low back pain or for neurogenic claudication inpatients with central spinal canal stenosis
     g. Any other spinal injections not specifically covered above

  2. NWL CCGs fund epidurals (local anaesthetic and steroid) only in patients who have less than three months history of acute and severe lumbar radiculopathy at time of referral.

  3. NWL CCGs will NOT fund Spinal fusion or lumbar disc replacement for low back pain. Surgical procedures for specific causes of LBP e.g. spondylolisthesis, scoliosis or severe structural disease are routinely funded where clinical indicated.

  4. NWL CCGs recommend that imaging should not routinely be offered in a non-specialist setting for people with low back pain with or without sciatica.
Referral Criteria: Low Back Pain and Sciatica

- Thresholds for **radiofrequency denervation for low back pain** (NWL PPwT version 4)
  
  

  - NWL CCGs fund radiofrequency denervation for chronic low back pain when:

    1. The patient has tried and exhausted all the conservative treatments / non-surgical management of the chronic low back pain (see clinical pathway in NICE Clinical Guidance 59) **AND**
    
    2. The patient has moderate or severe levels of localised back pain graded as 5 or more on a zero to 10 visual analogue scale, or equivalent at the time of assessment **AND**
    
    3. A diagnostic medial branch block has provided at least 80% improvement in pain on a zero to 10 on a visual analogue pain scale or equivalent.

- Any imaging (**including MRI spine**) performed in primary or community care should be available on IEP/receiving unit, and the reports forwarded with the referral. Any blood tests and pathology performed in primary or community care should be available on ICE/OpenNet and key results forwarded with the referral. Any previous relevant outpatient summary letters and imaging reports should be forwarded with the referral.

**Exclusions**

- Reasonable clinical suspicion of **undiagnosed** serious underlying pathology (red flags) including cancer, infection, trauma, severe and progressive neurology e.g. cauda equina syndrome. These patients will be referred back to GP for urgent assessment (same day), or to A&E as clinically appropriate. (Patients with a confirmed diagnosis and who have been medically assessed as appropriate for hospital pain clinic may be referred).

- Suspicion of peripheral vascular disease (e.g. aortic aneurysm, limb ischaemia). (Discuss with on-call vascular team).

- Suspected spondyloarthritis. (See ‘Inflammation of the Spine’ above).

- Patients who have not been triaged or referred from a community musculoskeletal service (including non-urgent internally generated referrals (consultant to consultant referrals).

- Exercise and manual therapies have not been tried where clinically appropriate.

- A previous discharge plan has advised that no further treatments would be helpful in the pain clinic, and there is no substantive change in the clinical presentation, and there are no medication issues that could be managed in primary care (e.g. where the GP and patient do not need specialist support to step down ineffective or harmful medication).

- PPwT form has not been completed by referrer where request is for a procedure covered by the policy.

- Referral is not accompanied by any pre-requisite imaging or investigations required by the PPwT policy, consultant or unit.