Birmingham and Solihull Integrated Care System
Caring about healthier lives

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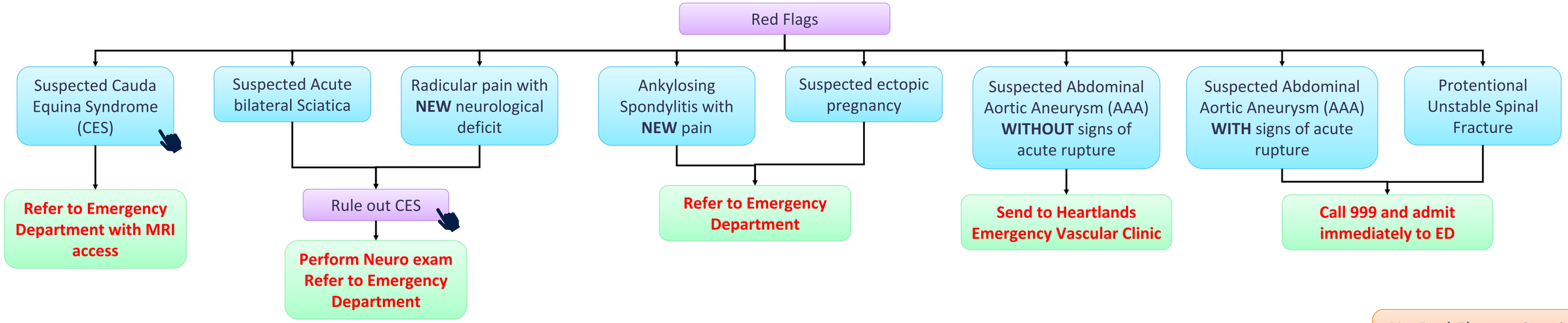
Review date	Every 12 months

Low Back Pain Pathway (age 16+)

Exclude Red Flags requiring Emergency treatment

- **New** (less than 2 weeks) **suspected Cauda Equina Syndrome (CES)**
- **Possible unstable fracture** - acute trauma, worsening neurology or inability to weight-bear
- **Ankylosing Spondylitis with new pain** - this must be treated as a fracture until proven otherwise by imaging
- **Acute bilateral Sciatica** (onset less than 2/52 of bilateral radicular leg pain with or without neuro deficit) **Radicular pain** is shooting or lancinating and extends along a narrow band. It is **different to somatic referred pain** which is typically a deep, ache and is felt in a broad area.
- **Radicular pain with New** (less than 7 days) **neurological deficit** (antigravity weakness i.e. inability to heel or toe walk or single-leg knee dip)
- **Suspected Abdominal Aortic Aneurysm (AAA) without signs of acute rupture**
- **Ectopic pregnancy**

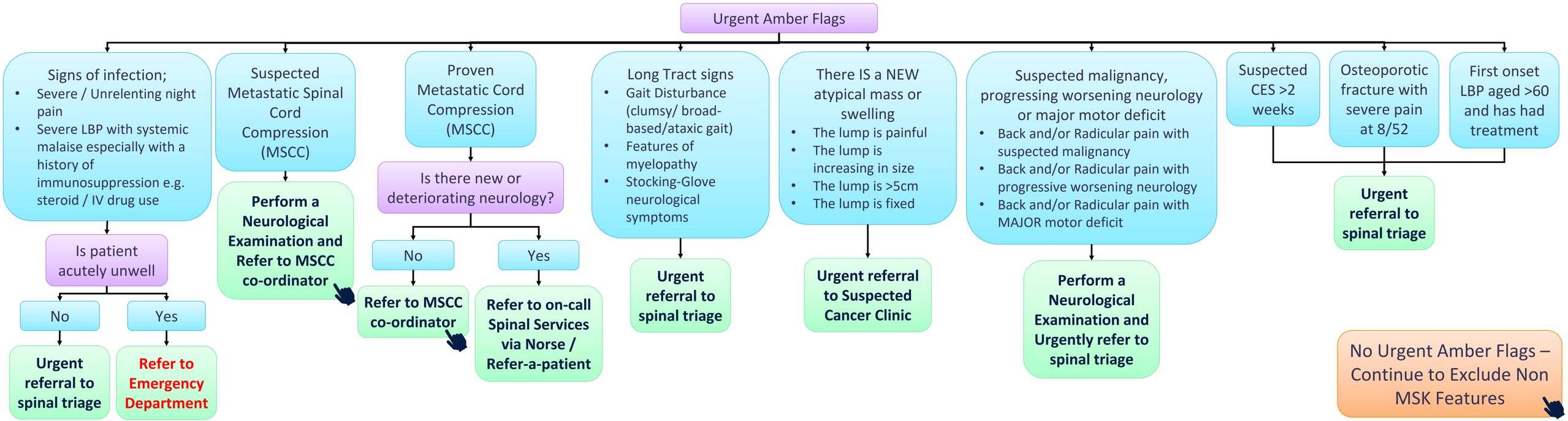


No Red Flags – Continue to Amber Flags

Return to start

Exclude Amber Flags requiring urgent treatment

- **Suspected Cauda Equina Syndrome (CES);** Onset >2 weeks, NB: Safety-net all before referral with CES card CES safety-net card
- **Back and/or Radicular Pain plus;** Suspected Infection or Malignancy, Progressive worsening neurology >1 week duration (change of 1 or more MRC grade power), **Major motor deficit** (loss of single-leg, anti-gravity power e.g., tiptoe walk, heel walk or knee dip)
- **Severe or Unrelenting Pain** ; Suspected Osteoporotic fracture with severe pain still at 8 weeks, Suspected Metastatic Spinal Cord Compression (MSCC) / Spinal Metastases (i.e., has signs of Spinal Cord compression e.g., long tract signs), Night pain
- **NEW Visible Mass or Atypical Swelling:** Consider soft tissue Sarcoma, especially if associated with constant dull ache, that may be worse at night; May be associated with malaise, unexplained weight loss and/or night sweats - NICE Guidance - Symptoms suggestive of bone and soft tissue sarcoma
- **Systemic Malaise;** especially with a history of immunosuppression e.g. steroid / IV drug use
- **Long Tract signs;** e.g., Gait disturbance (clumsy / broad-based / ataxic gait) or features of myelopathy
- **Age;** First onset of LBP aged **60 or above** with non-response to usual conservative treatment



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Exclude Non-MSK Pain

Features of Musculoskeletal (MSK) Low Back & Leg Pain	Features of Non-MSK pain (medical causes)
• Low Back Pain is very common - NHS Conditions webpage • **Varying intensity throughout the day and night**, with certain **activities or postures that make pain worse but also better**. • Exercise, general physical activity and changes of position tend to help pain. • Staying still / resting too long (e.g., sitting too long) tends to make pain worse. • Often there is an **attributable cause for the onset** of symptoms • It tends **to respond to simple analgesia and NSAIDs**.	Medical causes of back pain include • Aortic aneurysm • Ectopic pregnancy • Obstetric related pain • Acute pancreatitis • Duodenal ulcers • Urinary tract infections • Prostatitis • Kidney stones Non-MSK causes are often not relieved by rest and worse at night and are not usually aggravated by specific spinal movements. Pain will often progress regardless of activity modification

Return to start
Return to Red flags
Return to Amber flags
Start Low Back Pain Pathway

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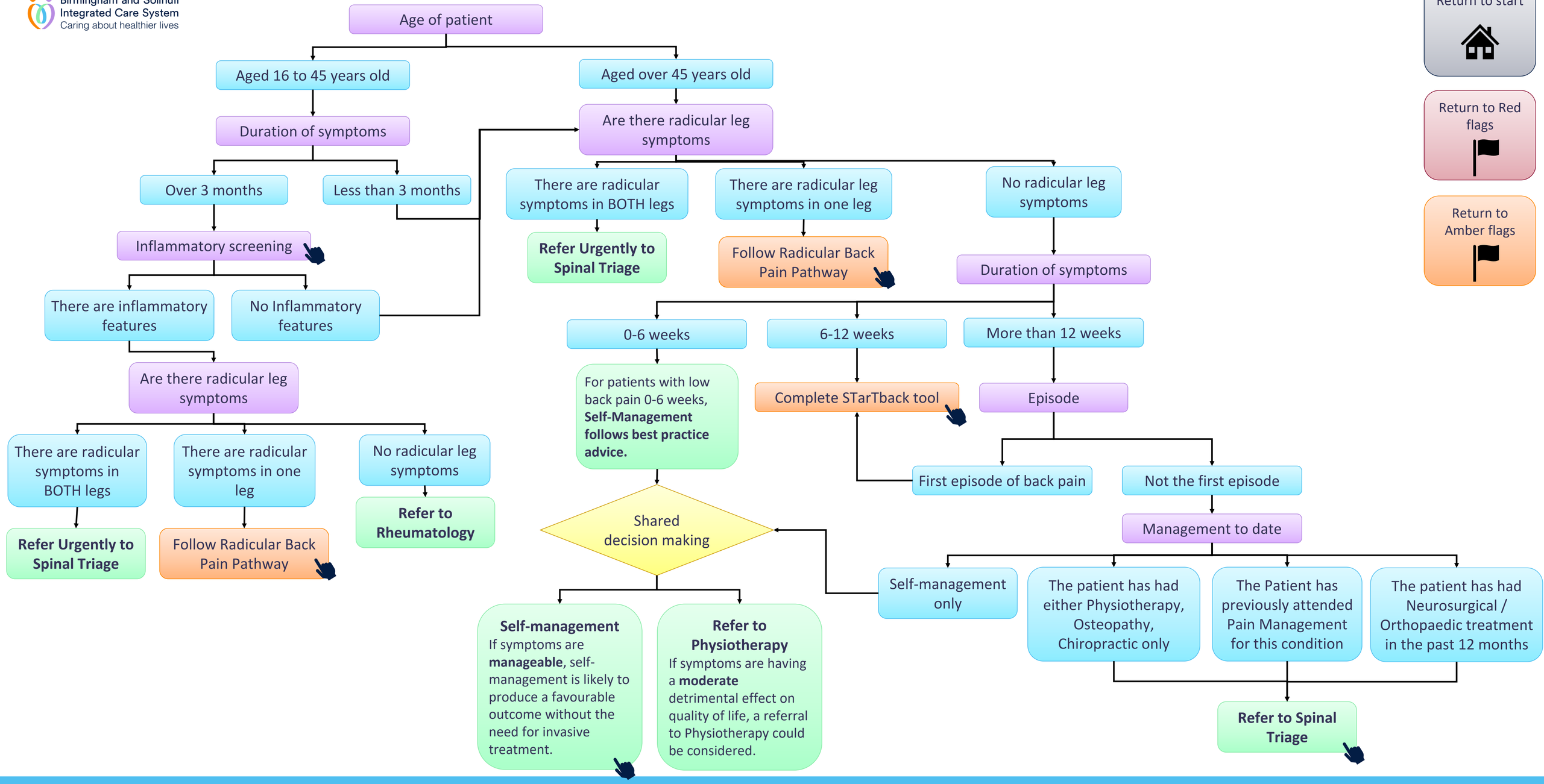

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Return to Main Pathway

Inflammatory Back Pain screening for patients aged 16 to 45 years old

Inflammatory Back Pain presentations of Spondyloarthritis (SpA) are often misdiagnosed as mechanical Low Back Pain, leading to delays in access to effective treatments.

Be aware that Inflammatory Back Pain (SpA):

- affects women = men
- can occur in people who are HLA-B27 negative
- may be present despite lack of Sacroiliitis on plain x-ray

Low back pain due to inflammatory causes usually presents with at least 3 of the following symptoms;

If 4 or more features below – refer to rheumatology

- Onset before 35 years of age
- Second half of the night waking
- Pain improves with movement
- Buttock pain
- Improves with NSAIDs (often within 48 hours)
- Close relative (parent, brother, sister, son or daughter) with spondyloarthritis
- Current or past Inflammatory Arthritis
- Current or past Enthesitis - tenderness at Tenosseous Insertion e.g. Achilles
- Current or past Psoriasis / Inflammatory Bowel Disease

If only 3 features, NICE recommends testing for HLA B27 - **if positive – refer to rheumatology**, if negative continue in LBP pathway.
If 2 or less features then continue in LBP pathway

Reference: NICE NG65 Guidelines
Reference: MSK, think SpA

Continue Low Back Pain Pathway

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Neurological Examination for back pain with radicular symptoms

Reflexes	
Absent Ankle Jerk (10)	
Absent Knee Jerk (10)	
Hyperreflexia (10)	
Normal Reflexes (0)	

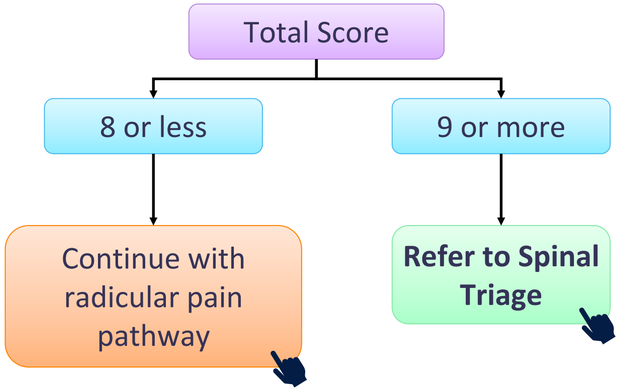
Sensation	
Altered L2 Sensation (1)	
Altered L3 Sensation (1)	
Altered L4 Sensation (1)	
Altered L5 Sensation (1)	
Altered S1 Sensation (1)	
Altered S2 Sensation (1)	
Non-dermatomal altered sensation (1)	
Normal Sensation (0)	

Myotomes (muscle power)	
Weakness in Plantorflexors (Toe Walk)(10)	
Weakness in Dorsiflexors (Heel Walk)(10)	
Weakness in Quads (Single-leg squat)(10)	
Normal Myotomes (0)	

Babinski Sign (plantar response) - perform test if suspicious of upper motor neurone lesion	
Positive Babinski Test (upgoing plantar response) (10)	
Normal Babinski (down going plantar response) (0)	

Neurodynamics (Straight Leg Raise) - perform test when posterior or posterolateral leg pain present	
Positive Straight Leg Raise (Leg Pain reproduced between 30-70 degrees hip flexion) (1)	
Normal Straight Leg Raise (0)	

Neurodynamics (Femoral Nerve Stretch Test) - perform test when anterolateral thigh and/or shin pain present	
Positive Femoral Nerve Stretch Test (Leg Pain reproduced between 80-100 degrees knee flexion) (1)	
Normal Femoral Nerve Stretch Test (0)	



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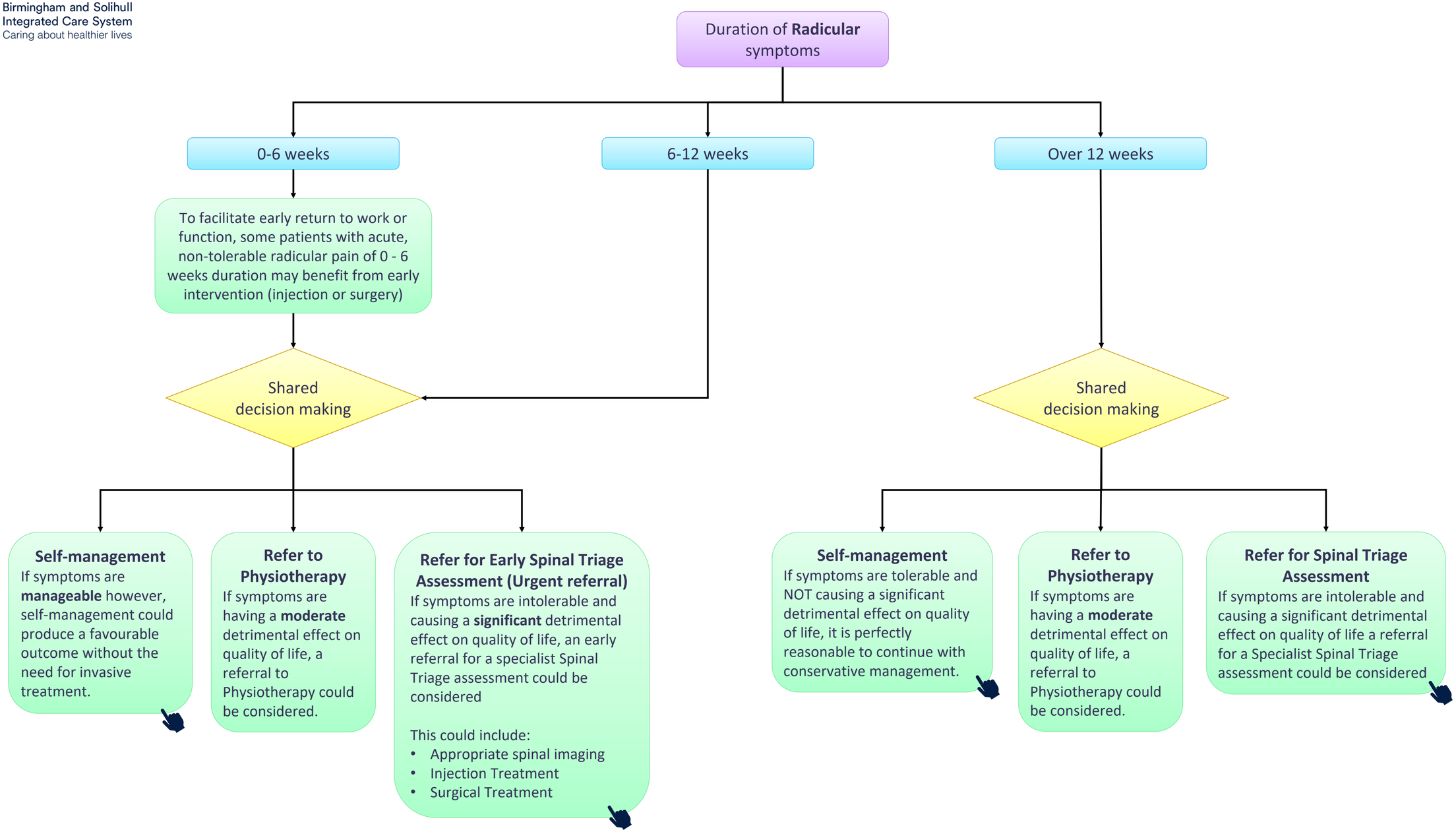

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The Keele STarT Back Screening Tool - LINK

The Keele STarT Back Screening Tool

Patient name: _____ Date: _____

Thinking about the **last 2 weeks** tick your response to the following questions:

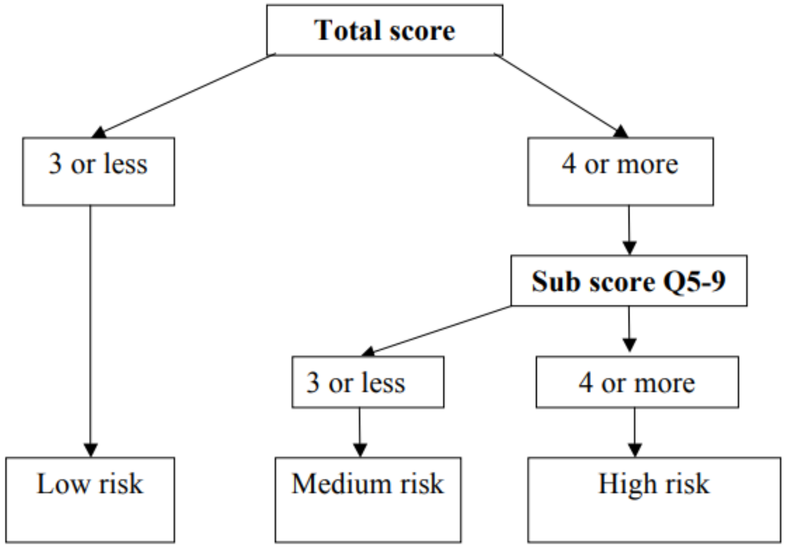
		Disagree 0	Agree 1
1	My back pain has **spread down my leg(s)** at some time in the last 2 weeks	☐	☐
2	I have had pain in the **shoulder** or **neck** at some time in the last 2 weeks	☐	☐
3	I have only **walked short distances** because of my back pain	☐	☐
4	In the last 2 weeks, I have **dressed more slowly** than usual because of back pain	☐	☐
5	It's not really safe for a person with a condition like mine to be physically active	☐	☐
6	**Worrying thoughts** have been going through my mind a lot of the time	☐	☐
7	I feel that **my back pain is terrible** and **it's never going to get any better**	☐	☐
8	In general I have **not enjoyed** all the things I used to enjoy	☐	☐

9. Overall, how **bothersome** has your back pain been in the **last 2 weeks**?

Not at all	Slightly	Moderately	Very much	Extremely
☐ 0	☐ 0	☐ 0	☐ 1	☐ 1

Total score (all 9): _____ Sub Score (Q5-9):_____

The STarT Back Tool Scoring System



Continue STarT Back Pathway

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Complete STarT back tool

Low risk

STarTback Risk Stratification guidance and best-evidence pathways suggest that for Low-Risk patients, **Self-Management is the best practice advice.**

Shared decision making

Self-management
If symptoms are **manageable** however, self-management could produce a favourable outcome without the need for invasive treatment.

Refer to Physiotherapy
If symptoms are having a **moderate** detrimental effect on quality of life, a referral to Physiotherapy could be considered.

Medium Risk

STarTback Risk Stratification guidance and best-evidence pathways suggest that for Medium Risk patients, **Physiotherapy is the best practice advice.**

Shared decision making

Self-management
If symptoms are **manageable** however, self-management could produce a favourable outcome without the need for invasive treatment.

Refer to Physiotherapy
If symptoms are having a **moderate** detrimental effect on quality of life, a referral to Physiotherapy could be considered.

Early referral to Spinal Triage
If symptoms are **intolerable** and causing a significant detrimental effect on quality of life however, an early referral to Spinal Triage could be considered.

High Risk

STarTback Risk Stratification guidance and best-evidence pathways suggest that for High-Risk patients, a **referral to Spinal Triage is the best practice advice.**

Shared decision making

Refer to Physiotherapy
If symptoms are only having a **moderate** detrimental effect on quality of life, a referral to Physiotherapy could be considered.

Refer to Spinal Triage
If symptoms are **intolerable** and causing a significant detrimental effect on quality of life, an early referral to Spinal Triage should be considered.

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Return to Red flags

Cauda Equina Syndrome

CES does not have a set clinical pattern, no single red flag or combination of flags has good diagnostic accuracy.

Negative physical tests do not rule out CES if positive subjective symptoms are present.

Sudden onset Bilateral Radicular Leg Pain or unilateral radicular leg pain that has progressed to bilateral leg pain (sciatica) may be a warning symptom that CES may occur.

A digital rectal examination is not necessary but subjective perianal sensation should be recorded below. This area may be small or as big as a horses' saddle (subjectively reported or objectively tested).
Positive symptoms requiring emergency

- New (within 2 weeks) or deteriorating difficulty initiating micturition or impaired sensation of urinary flow
- New (within 2 weeks) or deteriorating altered perianal, perineal or genital sensation S2-S5 dermatomes
- New (within 2 weeks) or deteriorating loss of sensation of rectal fullness

Deteriorating sexual dysfunction is defined as achievement of erection or ability to ejaculate, loss of genital sensation

Acute (less than 2/52 onset of CES symptoms) suspected Cauda Equina Syndrome requires Emergency Scanning and appropriate follow-up, via ED +/- Neurosurgery/Spinal Surgery. MRI is advised via ED, within 4 hours.
GIRFT National CES Pathway

In hour presentation - Emergency Departments with access to MRI during core hours are:

- Queen Elizabeth Hospital Birmingham
- Birmingham Heartlands Hospital
- Good Hope Hospital
- City Hospital
- Sandwell Hospital

Same-day MRI and spinal surgery review is also available at The Royal Orthopaedic Hospital Birmingham via their on-call system. Please ring ROH Switchboard on: 0121 685 4000

Please immediately refer your patient to one of the services listed above

Out of hours presentation – Refer to Emergency Department with 24 hour MRI access

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Refer to MSCC co-ordinator

Metastatic Spinal Cord Compression (MSCC) is rare, but very serious. About 3 to 5 in 100 people with cancer develop it.

Any type of cancer can lead to spinal cord compression, but it is more common in people with Breast cancer, Lung cancer, Prostate cancer, Kidney cancer, or Thyroid cancer

Spinal cord compression is an emergency and needs to be treated quickly. Refer your patient immediately to the Metastatic Spinal Cord Compression service at your nearest hospital

MSCC patients will be seen in the Acute Oncology Service at UHB (seven days service 07.30 – 19.30)
Contact details:
Queen Elizabeth: 07880021524 or Ext 16226
Heartlands / Solihull – 07570318173
Good Hope – 07823536403
Oncology Registrar on call outside of these hours on 07557776342.

or

Royal Orthopaedic Hospital
If you need to make a spinal oncology referral for patients with MSCC, metastatic or primary spinal tumours, the ROH use an online referral system accessed using the link below
ReferaPatient
Alternatively, you can contact switchboard at ROH on 0121685400 and ask for spinal oncology nurse within normal working hours

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Self-management for low back pain

The patient should be reassured that most patients will recover with self-management including; physical activity, exercise and short-term activity modification only, over a period of up to 12 months .

Consider oral non-steroidal anti-inflammatory drugs available OTC
Consider weak opioids OTC (+/- paracetamol) for managing acute low back pain only if an NSAID is contraindicated, not tolerated or has been ineffective. Do not use opioids for managing chronic low back pain.
If patient is digitally enabled, prescribe the getUbetter app
Provide guidance on work activities and provide a fit note, where appropriate
Safety net for urgent clinical review regarding cauda equina or other red flags **CES Card**
If patient is pregnant or <12 months post-partum consider referral to **Pelvic Health Service**

Messaging for patients

- Movements will be painful at first, but will get better as you get active
- Protecting your back and avoiding movement can make you worse
- The pain does not mean you are causing damage – your back has just become more sensitive
- It is very rare to do permanent damage to your back
- Please come back to/contact your GP or FCP if your symptoms significantly worsen
- Imaging is **NOT** routinely needed for back pain, as MRI cannot diagnose the source of your back pain Best MSK Health MRI guide
- Return to GP if symptoms are not improving and affecting sleep, quality of life or daily function (including work)

Additional information

- Exercises for your back pain
- Keele university – back pain guide
- The active wellbeing society
- Low back pain and sciatica in over 16s: assessment and management

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Referral to Spinal Triage

Please consider bloods such as FBC, ESR/CRP, LFT, u&e, bone profile, PSA if appropriate whilst waiting for Triage appointment
Provide guidance on work activities and provide a fit note, where appropriate
Safety net for urgent clinical review regarding cauda equina or other red flags **CES Card**

Messaging for patients

- A Spinal Triage assessment, including the use of imaging (X-Rays or MRI scans) where required, can provide specialist assessment and advice regarding future care.
- Imaging is **NOT** routinely needed for back pain, as MRI cannot diagnose the source of your back pain Best MSK Health MRI guide
- Where MRI is appropriate that it will be arranged by the spinal triage clinician.
- Whilst you are waiting for your Spinal Triage appointment, try and keep active and take gentle exercise:
- Movements will be painful at first, but will get better as you get active
- Protecting your back and avoiding movement can make you worse
- The pain does not mean you are causing damage – your back has just become more sensitive
- It is very rare to do permanent damage to your back
- Please come back to/contact your GP or FCP if your symptoms significantly worsen

Additional information

- NICE LBP and Sciatica in over 16s
- Exercises for your back pain
- The active wellbeing society