

# Inflammatory back pain in primary care – focus on Axial Spondyloarthritis

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Dr Neil Heron, MRCGP, F.FSEM(UK), PhD

Niamh Kennedy, Advanced Practice Physiotherapist RVH

Dr Adrian Pendleton, Clinical Lead for Rheumatology BHSCT, Consultant Rheumatologist, MD FRCP FRCPI



# slido



**Rate your current confidence in diagnosing and managing inflammatory back pain from 1 (not confident at all) to 10 (I'm an inflammatory back pain expert).**

ⓘ Start presenting to display the poll results on this slide.

slido



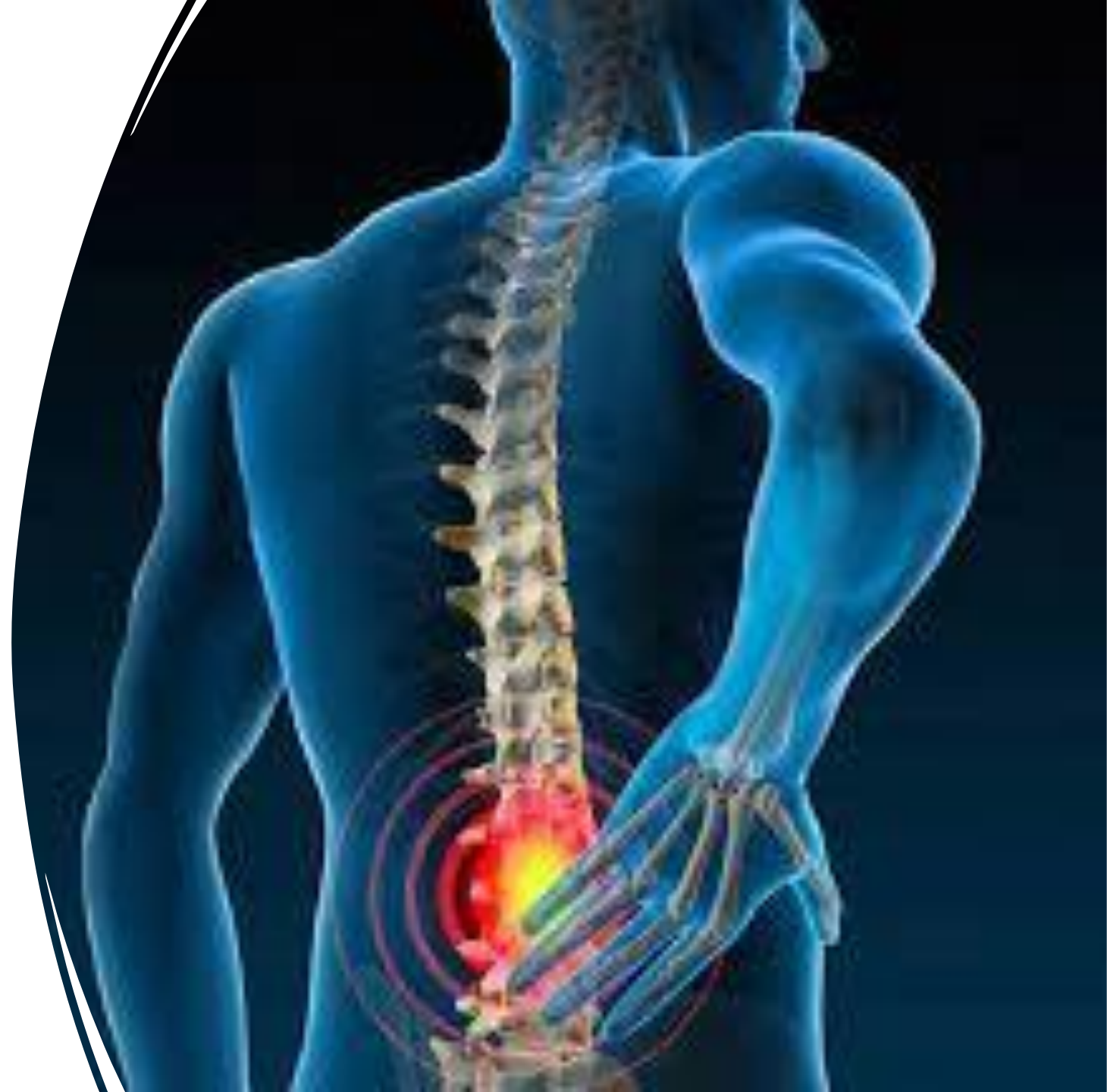
**Are you aware of the inflammatory back pain referral pathway in Belfast Trust?**

ⓘ Start presenting to display the poll results on this slide.

# Back pain in GP

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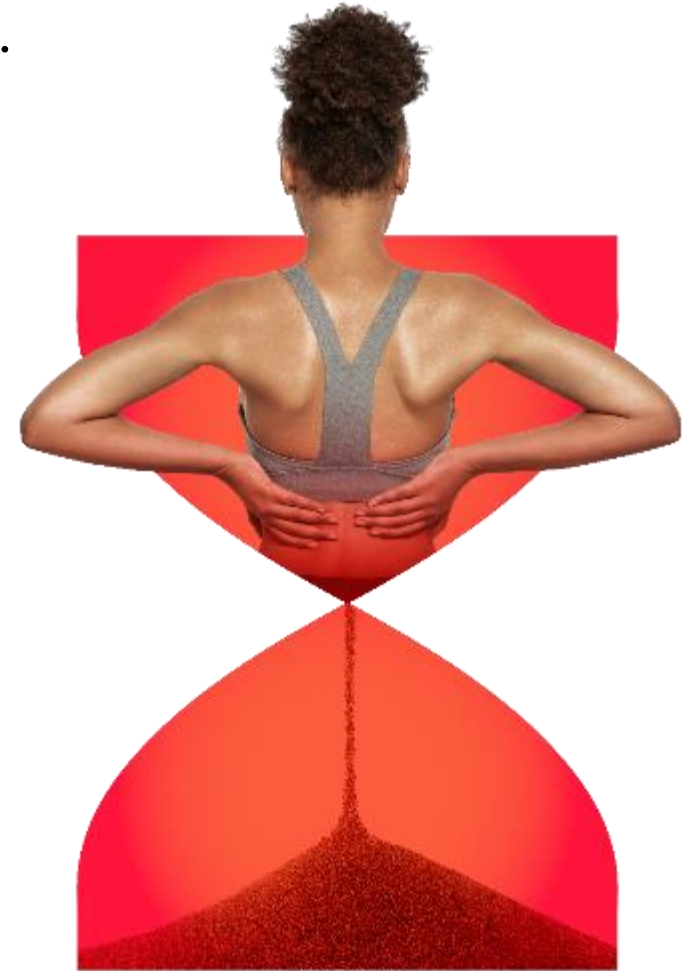
- Back pain common presentation to GP
  - Prevalence 15-45%
  - Incidence 5%
  - 5-10% of acute back pains will become chronic
- Not every back pain is inflammatory....but need to be aware of differential



# What is Axial Spondyloarthritis (Axial SpA)?

Umbrella term for inflammatory arthritis affecting spine and Sacroiliac joints.


- Ankylosing Spondylitis (AS) radiographic Axial SpA
  - Changes to the sacroiliac joints seen in x-ray
- Non radiographic Axial SpA (nr-AxSpA)
  - X-ray changes not present
  - Inflammation is visible on MRI
  - Person has a range of other symptoms



act on  
Axial SpA

# Axial SpA - what are the key characteristics?



- Inflammatory pain
  - Morning stiffness;
  - Improves with exercise
  - Good response to NSAIDs
- Functional impairment
- Onset typically starts late teens early 20's (average age 26yrs)
- Can have lifelong impact and long term implications if left untreated
- Diagnosis is difficult and often delayed



**Back pain?  
Don't wait until  
it's too late.**

Check the symptoms. It could be axial SpA.  
See your GP.

Get axial SpA diagnosed.  
Find out more at [actonaxialspa.com](http://actonaxialspa.com)



**act on  
Axial SpA**

Campaign fully funded by UCB.

Inspired by patients.  
Driven by science.

Royal United Hospitals NHS  
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NHS  
Hertford and Hemel  
University Hospitals  
NHS Foundation Trust

# Axial SpA - what are the key characteristics?

- Inflammation occurs where tendon attaches to bone
- Inflammation is followed by some wearing away at the site of attachment
- As inflammation reduces, healing takes place and new bone develops
- Movement becomes restricted when bone replaces elastic tissue of ligaments or tendons
- Repetition of this process can cause vertebrae to fuse



Could your  
persistent back  
pain be axial SpA?

Serious and Irreversible damage can be done with each passing year.  
See your GP.

Get axial SpA diagnosed.  
Find out more at [actonaxialspa.com](http://actonaxialspa.com)

act on  
Axial SpA



Campaign fully  
funded by UCS.

Inspired by scientists.  
Driven by science.

NIHR  
Royal United Hospital, Bath  
NIHR Research Design  
Centre

NIHR  
Bristol and Gloucestershire  
University Hospitals  
NIHR Research Design  
Centre

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Axial SpA

# Axial SpA what are the key symptoms?

Inflammatory arthritis affecting spine and Sacroiliac joints.

1. Back pain started before the age of 40
2. Back pain developed slowly
3. Chronic back pain lasting greater than 3 months
4. Back stiffness upon waking
5. Back pain improves with exercise / movement
6. Back pain worse with rest
7. Alternating buttock pain
8. Regular waking at night

**S**ymptoms starting slowly  
**P**ain in the lower back  
**I**mproves with movement  
**N**ight time waking  
**E**arly onset (under 40)

Complete the NASS symptom checker\*: [Symptom checker](#)

\*Sieper J, van der Heijde D, Landewe R, Brandt J, Burgos-Vargas R, Collantes-Estevez E, et al. New criteria for inflammatory back pain in patients with chronic back pain: a real patient exercise by experts from the Assessment of SpondyloArthritis International Society (ASAS). *Annals of the rheumatic diseases*. 2009;68(6):784-8.

Rudwaleit M, Metter A, Listing J, Sieper J, Braun J. Inflammatory back pain in ankylosing spondylitis: a reassessment of the clinical history for application as classification and diagnostic criteria. *Arthritis Rheum*. 2006;54(2):569-78.

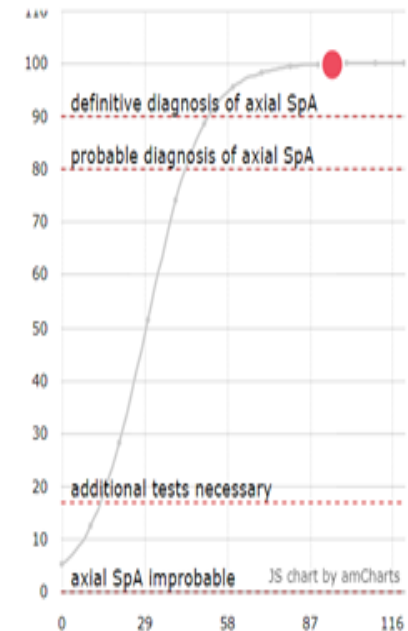
Calin A, Porta J, Fries JF, Schurman DJ. Clinical history as a screening test for ankylosing spondylitis. *JAMA*. 1977;237(24):2613-4



# SPADE tool [www.spadetool.co.uk](http://www.spadetool.co.uk)

Developed by Dr Raj Sengupta and Team

- Inflammatory type back pain
- Heel pain (enthesitis)
- Peripheral arthritis
- Dactylitis
- Iritis or anterior uveitis
- Psoriasis
- Positive family history of axial SpA, reactive arthritis, psoriasis, IBD or anterior uveitis
- Good response to NSAIDs
- Raised acute-phase reactants (CRP/ESR)
- HLAB27
- Sacroiliitis shown by MRI



**Definitive  
diagnosis of  
Axial SpA**

This patient is very likely to have Axial SpA - assessment by a rheumatologist is recommended

# Extra-musculoskeletal manifestations (EMM) of axial SpA?

Extra-musculoskeletal manifestations (EMMs) are common, important features of axial spondyloarthritis (axial SpA).

The most prevalent being –

- acute anterior uveitis (AAU),
- inflammatory bowel disease (IBD) and
- psoriasis.

Other EMMs are:

- Enthesitis
- Dactylitis



## Axial SpA and uveitis?



**40%** of people with acute anterior uveitis have spondyloarthritis<sup>1</sup>

**26%** of people with axial spondyloarthritis including ankylosing spondylitis (AS) have acute anterior uveitis<sup>2</sup>



### Ask your patients

Have you had back pain for more than three months?  
Could it be inflammatory?

**Symptoms starting slowly**

**Pain in the lower back**

**Improves with movement**

**Night time waking**

**Early onset (under 40)**

**If your patient has inflammatory back pain and uveitis refer to rheumatology**

Help us reduce the 8.5 year diagnostic delay for axial spondyloarthritis.



visit [actonaxialspa.com](https://actonaxialspa.com)

to find more information, tools to support you and patient stories.

<sup>1</sup>A novel evidence-based detection of undiagnosed spondyloarthritis in patients presenting with acute anterior uveitis: the DUET (Dublin Uveitis Evaluation Tool), Muhammad Haroon, Michael O'Rourke, Pathmas Ramesamy, Conor C Murphy, Oliver Fitzgerald, *Annals of the Rheumatic Diseases*, June 2019.

<sup>2</sup>Prevalence of extra-articular manifestations in patients with ankylosing spondylitis: a systematic review and meta-analysis, Carmen Stelbrink, Astrid van Tubergen, José Domingo Castillo-Cruz, Annelies Boonen, *Annals of the Rheumatic Diseases* 2016; 75:665–723 Delay to diagnosis in axial spondyloarthritis: are we improving in the UK? Mark P. Syme, Helen Dall, Raj Sengupta and Karl Gaffney, *Rheumatology*, July 2016; NASS is a registered charity in England and Wales (272258) and Scotland (SC041647).

Funded by:



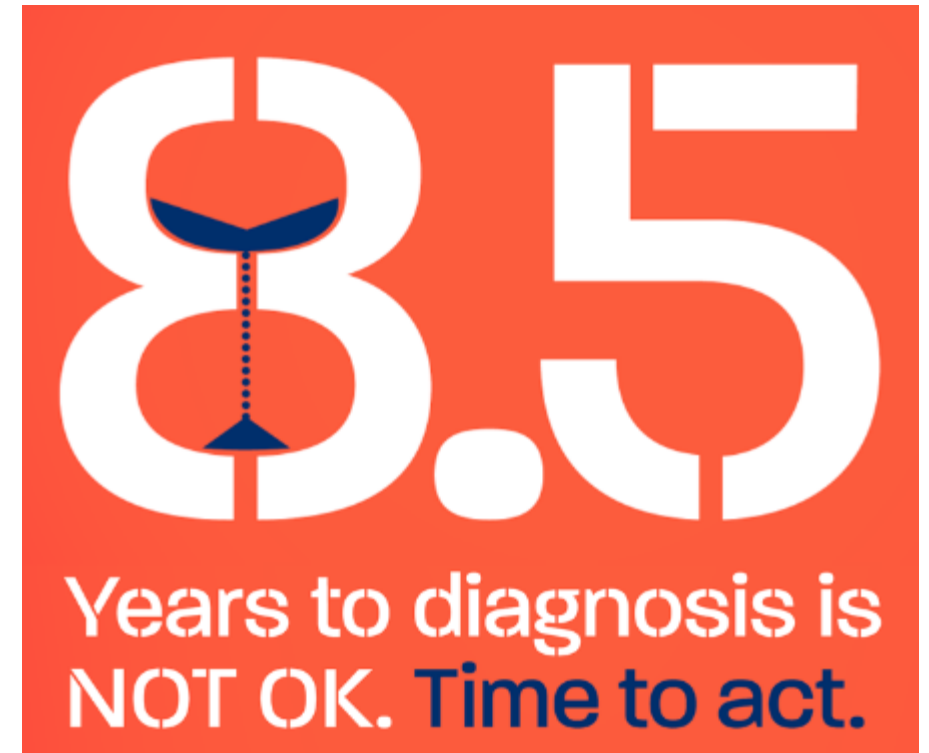
In partnership with:



**act on Axial SpA**

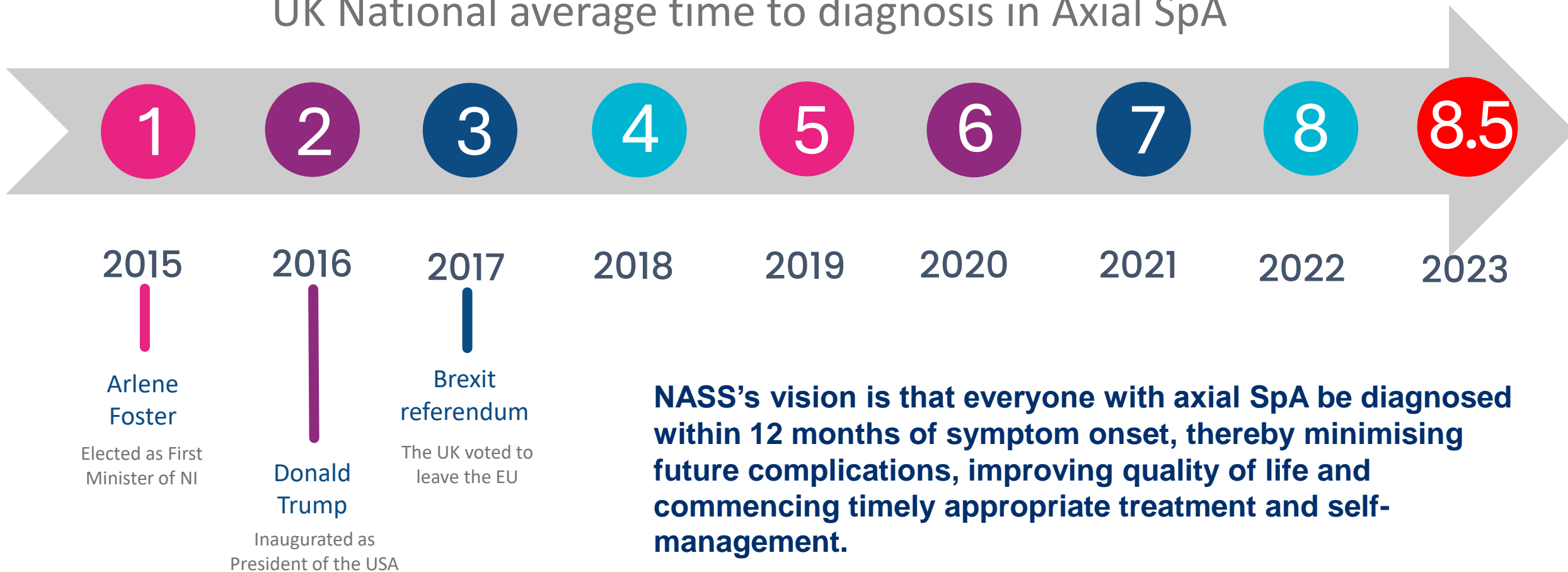
# Axial SpA key statistics

- 1 in 200 of the adult population in the UK have Axial SpA (AS).
  - Twice as many as multiple sclerosis and Parkinson's disease.
- Onset typically starts late teens early 20's (average age 26yrs)
- 8.5 years average time to diagnosis in the UK, from symptom onset.
- 59% of people with axial SpA report experiencing mental health problems compared to 25% of those with musculoskeletal conditions overall.
- **Affects the same number of females and males.**
- 85-90% of people with axial SpA carry the HLA-B27 gene
- 91% of the UK population have never heard of axial SpA



# Why are we here?

## UK National average time to diagnosis in Axial SpA

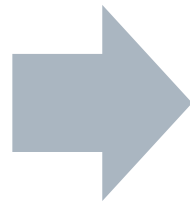


Sykes, M. P., et al. (2015). "Delay to diagnosis in axial spondyloarthritis: are we improving in the UK?" *Rheumatology (Oxford)* 54(12): 2283-2284.

Webb, D. et al. (2021). "Delay to diagnosis in axial spondyloarthritis – time for a gold standard approach" *Annals of the Rheumatic Diseases* 80: 235-236

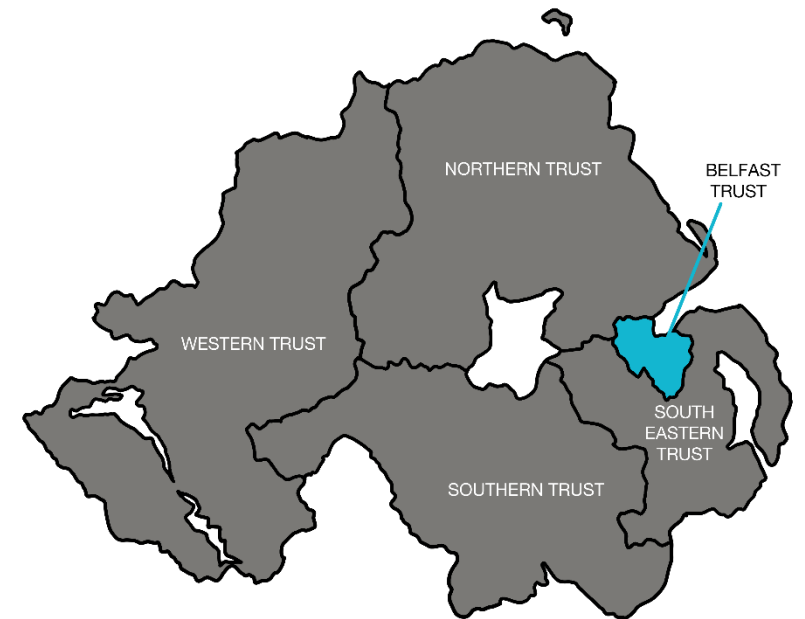
# AxSpA in our population

Axial SpA affects approx. 1 in 200 people



BHSCT  
340,000  
people =  
1,700 with  
AxSpA

1.9 m  
people in NI  
=  
9,500 with  
AxSpA



# Gender in axial SpA

**Axial SpA affects both women and men from a young age. It is no longer seen as a male disease. Females have a 2 year longer time to diagnosis around the world.**



- Men with axial SpA show a higher rate of radiological progression compared with women.
- Non-radiographic axial SpA (nr-axSpA) is more prevalent in women (67% vs 33%)
- Ankylosing Spondylitis or radiographic axial SpA is more prevalent in men (67% vs 33%)
- Women with axial SpA have, in general, higher disease activity scores (higher BASDAI, lower ASQoL, lower BASMI)
- Women with axial SpA also have more peripheral manifestations compared to males (enthesitis, IBD, Psoriasis and Peripheral Arthritis)
- Women are more likely to have a lower CRP inflammatory markers and a higher incidence of negative HLA-B27

# Treatment targets for Axial SpA

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Ultimate goals of therapy  
in SpA include:

1

Achieve the **lowest possible level of disease activity** in all domains

2

Prevent structural damage

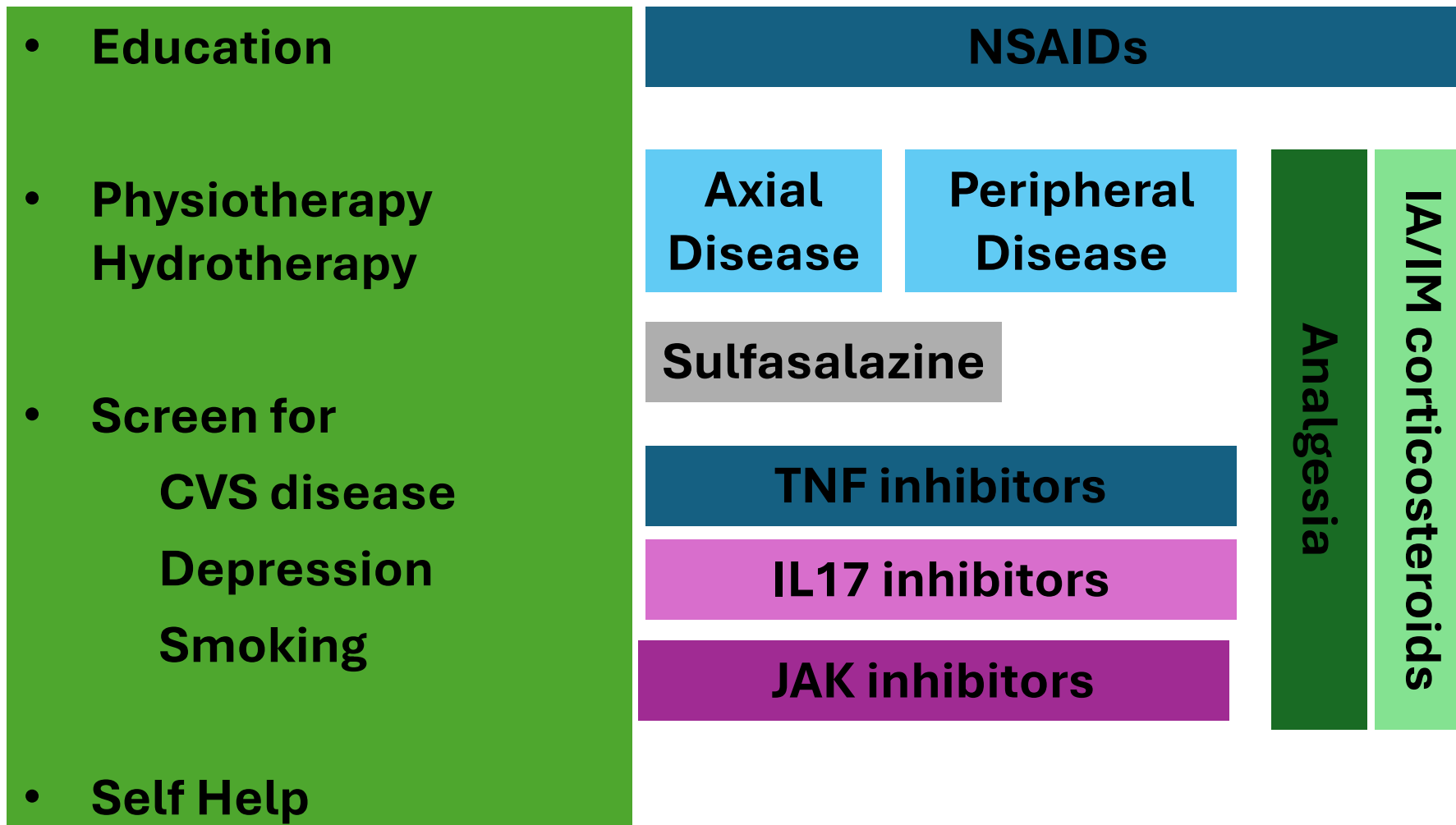
3

Normalise/preserve functional status

4

Optimise long-term health-related quality of life and well-being

# Management of Axial SpA





# NICE approved treatments Axial SpA

## TNF inhibitors

- Adalimumab, Infliximab, Certolizumab, Etanercept, Golimumab (TA383 and 497)

## IL17 inhibitors

- Secukinumab, Ixekizumab, Bimekizumab ((TA 719,718 and 918)

## JAK inhibitors

- Upadacitinib (TA861)

[www.nhs.uk](http://www.nhs.uk) includes back pain reassurance, signposting and **NB safety netting information.**

The screenshot shows the NHS website interface. At the top is the NHS logo and a search bar. Below that are navigation tabs for Health A-Z, Live Well, Mental health, Care and support, and Pregnancy. The main heading is 'Back pain'. The text explains that back pain is common and usually improves within a few weeks. It lists causes of back pain, such as injury or medical conditions. There are sections for 'How to ease back pain yourself' and 'Do' (stay active, take anti-inflammatory medicine, use ice/heat packs) and 'Don't' (do not stay in bed for long periods of time).

Other places to find back pain exercises include:

- [NHS back pain pilates video workout](#)
- [Chartered Society of Physiotherapy: video exercises for back pain](#)
- [BackCare: exercises for back pain](#)

Activities like walking, swimming, yoga and pilates may also help ease back pain.

**See a GP if:**

- back pain does not improve after treating it at home for a few weeks
- the pain is stopping you doing your day-to-day activities
- the pain is severe or getting worse over time
- you're worried about the pain or you're struggling to cope

▶ [What we mean by severe pain](#)

**Ask for an urgent GP appointment or get help from 111 if:**

You have back pain and:

- a high temperature
- you've lost weight without trying to
- there's a lump or swelling in your back or your back has changed shape
- the pain does not improve after resting or is worse at night
- the pain is made worse when sneezing, coughing or pooing
- the pain is coming from the top of your back (between your shoulders), rather than your lower back

You can call 111 or [get help from 111 online](#).

**Call 999 or go to A&E if:**

You have back pain and:

- pain, tingling, weakness or numbness in both legs
- numbness or tingling around your genitals or buttocks
- difficulty peeing
- loss of bladder or bowel control (peeing or pooing yourself)
- chest pain
- it started after a serious accident, such as a car accident

# Useful resources

[www.versusarthritis.org](http://www.versusarthritis.org) very informative website including back pain exercise leaflets and videos

**Information and exercise sheet**

## BACK PAIN

Staying active is the most important thing you can do to recover from back pain. Try to carry on with your daily activities, as resting too much could cause the pain to get worse. This sheet includes some exercises you can do to reduce your back pain, and they'll also help improve the strength and flexibility of your back.

Your back pain should start to ease after two weeks, and will usually pass after four to six weeks. You may not need to see anyone, but if the pain doesn't get better in a few weeks, or if you have severe pain while doing the exercises below, make an appointment with your GP or physiotherapist. You can also speak to a pharmacist.

**Exercises**

Many people find the following exercises helpful. If you need to, adjust the position so that it's comfortable. Try to do these exercises regularly. Do each one a few times to start with, to get used to them, and gradually increase how much you do.

**1. Knees to chest**

Lie on your back, with your knees bent and feet flat on the floor or bed. Bring one knee up and use your hands to pull it gently towards your chest. Hold the leg in position for five seconds, and then relax. Repeat this exercise with the other knee. Do the exercise five times on each side.

**2. Deep lunge**

Kneel on your right knee. Put your left leg in front of you, with your left foot on the floor. Facing forwards, lift your back knee up. Hold for five seconds. Repeat three times, then swap legs.

Illustration 1 shows a person lying on their back with knees bent and feet flat on the floor, pulling one knee towards their chest. Illustration 2 shows a person kneeling on their right knee with their left leg in front of them, lifting their back knee up.

**3. Half push-ups**

Lie on your front, with your forearms flat on the bed or floor, and your elbows bent at your sides. Look down and keep your neck straight. Slowly push down on your hands and arch your back up, keeping your hips on the floor or bed. You should feel a stretch in your tummy muscles. Hold this for 5 to 10 seconds, then go back to the starting position. Gradually build up so that you're able to repeat this exercise 10 times. If you struggle to fully straighten your arms, start by arching your back halfway and resting on your elbows.

**4. Knee rolls**

Lie on your back, with your knees bent and your feet together. Roll your knees to one side, keeping your shoulders flat on the bed or floor, and hold for 10 seconds. Roll your knees back to the starting position, and then over to the other side and repeat. Do this exercise three times on each side.

**5. Arching and hollowing**

Get onto your hands and knees, making sure your hands are under your shoulders and your knees are under your hips. Arch your back upwards and let your head drop down. Hold this position for five seconds. Go back to the starting position, and then slowly lift your head up while relaxing your tummy and sticking your bottom out. Hold this position for five seconds, then repeat the move five times.

Illustration 3 shows a person lying on their front with forearms flat on the floor, arching their back up. Illustration 4 shows a person lying on their back with knees bent and feet together, rolling their knees to one side. Illustration 5 shows a person on their hands and knees, arching their back upwards and then hollowing it out.

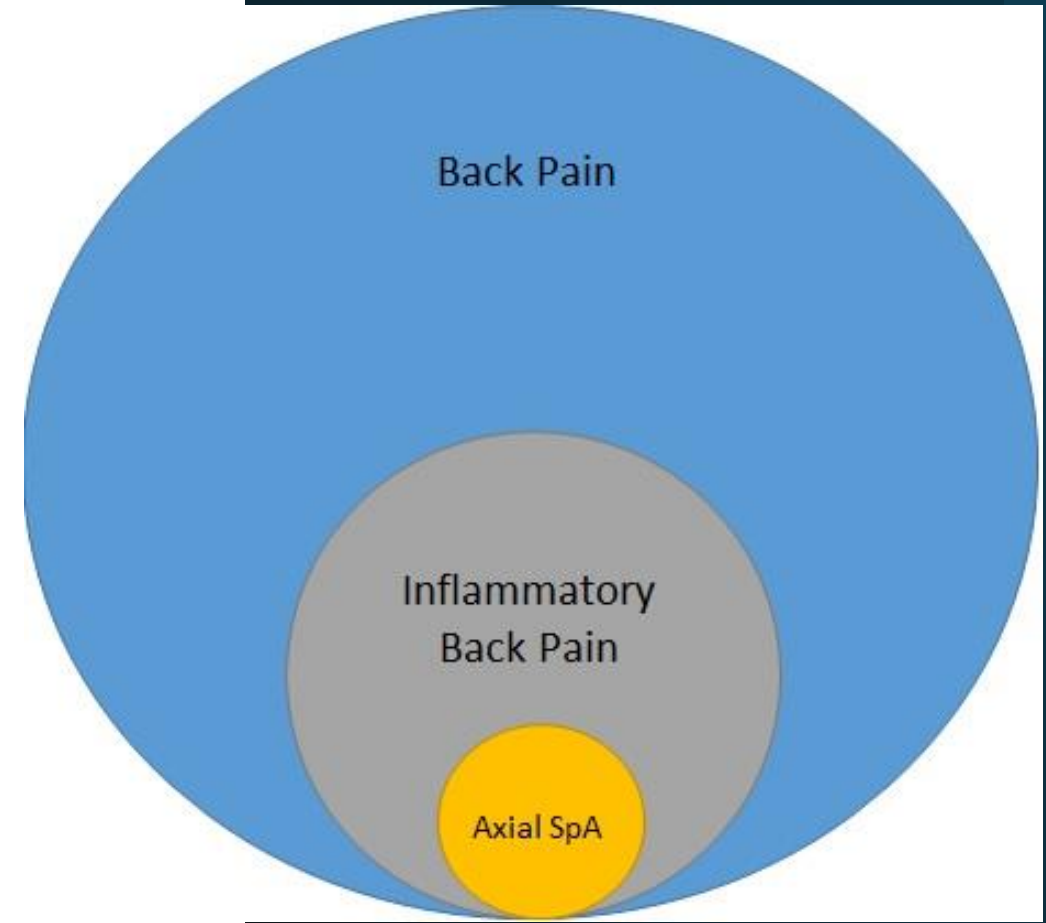
**VERSUS ARTHRITIS**

0300 790 0400  
 f /VersusArthritis  
 @VersusArthritis  
 @VersusArthritis

For more information please visit our website [versusarthritis.org](http://versusarthritis.org)  
 Versus Arthritis: Registered Charity England and Wales No. 207711, Scotland No. SC041155.

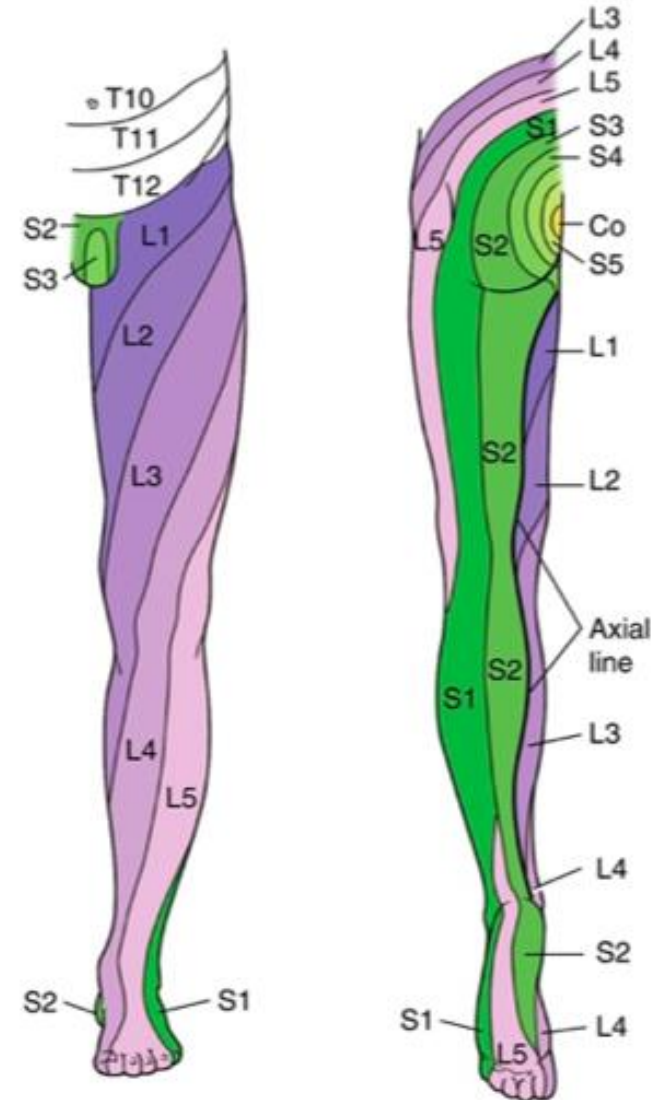
# Diagnosis of Axial SpA

- Diagnosis of axial SpA is based on a combination of clinical (symptoms), laboratory (blood tests) and imaging (x-ray/MRI) features.
- Rational set of bloods in primary care:
  - FBC
  - U&E
  - LFTs
  - CRP and ESR
  - TFTs
  - Bone profile
  - HLA-B27 (if –ve, doesn't exclude AxSpA)
  - May consider – RF, anti-CCP (depending on presentation)
- Early referral to inflammatory back pain clinic (DR Pendleton, Belfast Trust)
- **DO NOT DELAY REFERRAL if blood tests are normal**
- No SIJ x-ray from primary care
- Please do NOT arrange a spinal MRI, as rheumatology do specialist scans as deemed necessary.

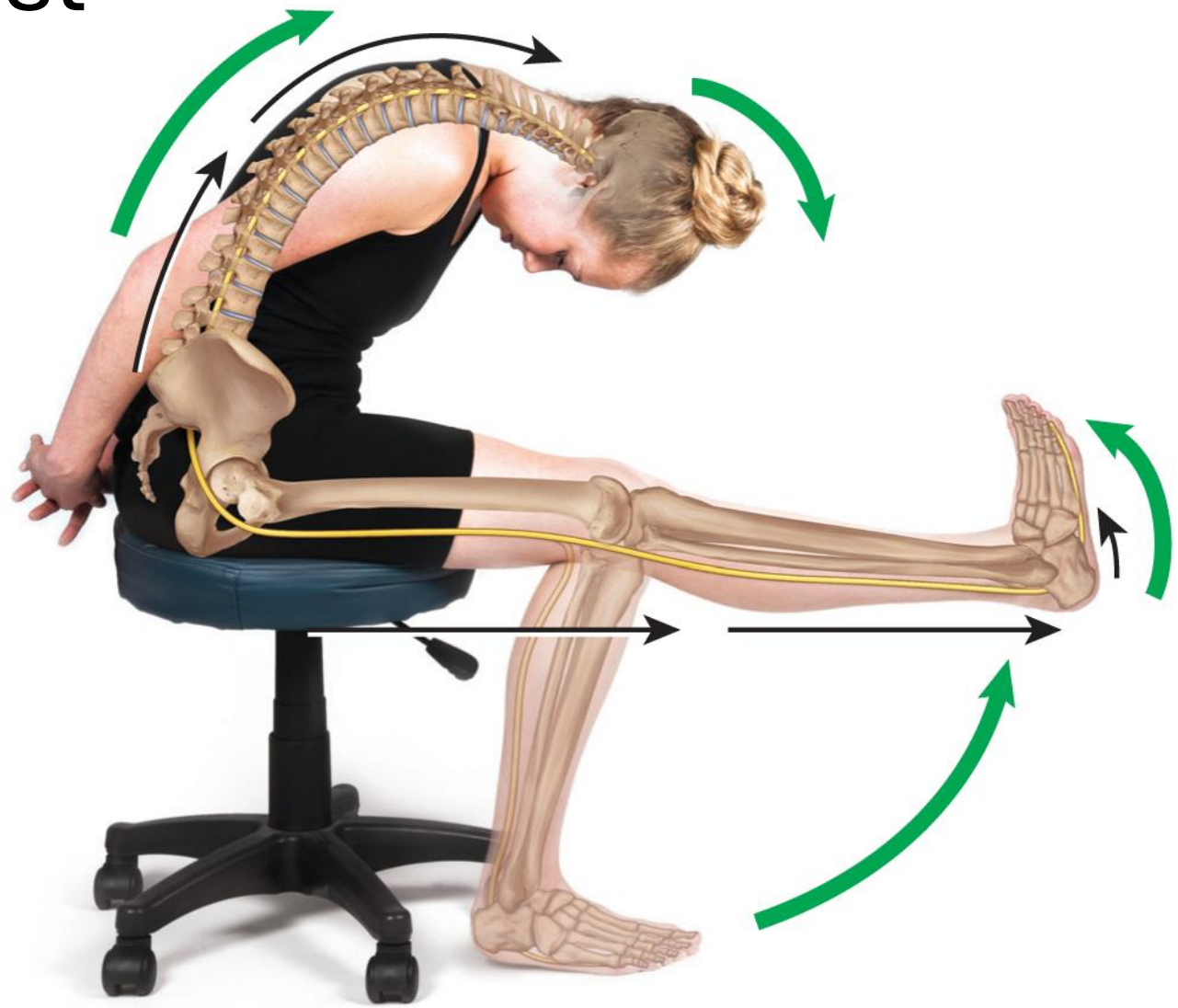


# Matrix for examination of lumbar spine

- **LOOK:** limp or obvious deformity (e.g. scoliosis, kyphosis, lordosis, pelvic shift, scars/wasting/rash)
- **FEEL:** feel spinous processes, paraspinal muscle tender points
- **MOVE:** extension, lateral flexion, flexion
- **TEST:** tell the patient you are going to check how the nerves in their back are working
- Ask the patient to: stand on tip toes (S1), stand on heels (L4), then move to a sitting position
- Big toe dorsiflexion (L5): “pull your big toe up towards you”
- Check reflexes: ankle jerk (L5/S1), knee (L3/4), check sensation, SLUMP test
- Then ask the patient to lie on their back and check: SLR, screen hip, LLD, Babinski, peripheral pulses as relevant
- Consider checking other parts of body, e.g. abdomen, breast, prostate

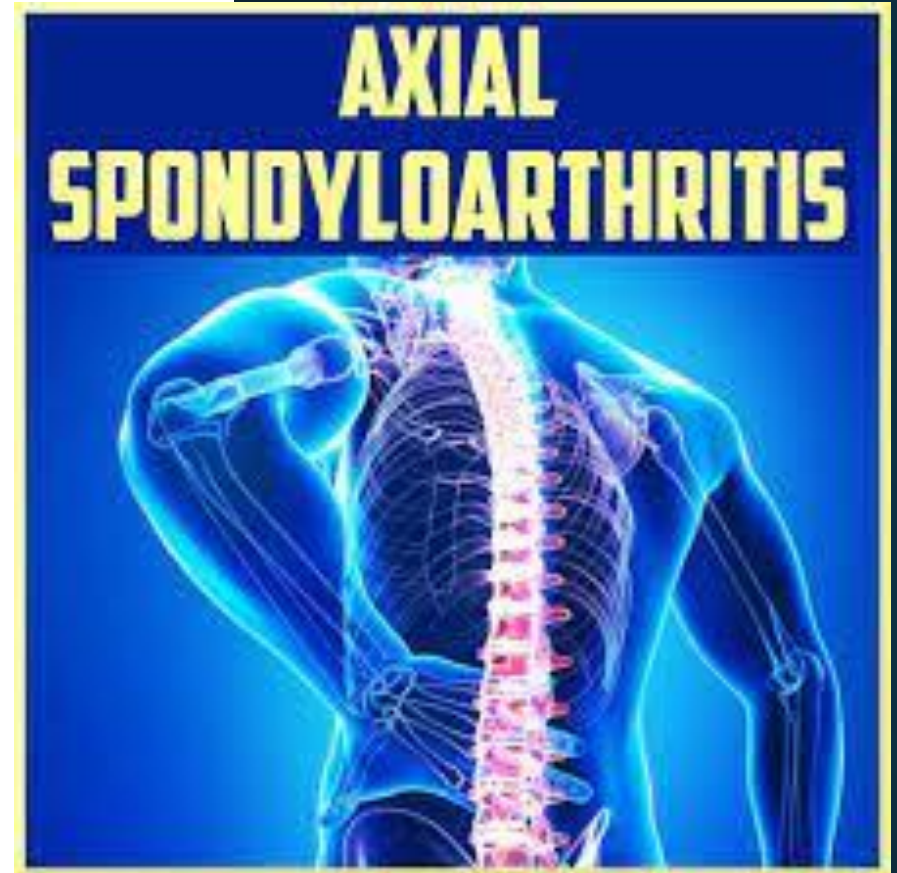


# Slump Test



# As a GP, what do I include in my referral letter?

- Refer to the suspected inflammatory back pain service via NIECR (seen by Dr Adrain Pendelton, Belfast Trust)
- Duration of symptoms<sup>[1][SEP]</sup>
- Pattern of joint involvement / spinal symptoms<sup>[1][SEP]</sup>
- Presence / duration of Early Morning stiffness esp if >30 mins<sup>[1][SEP]</sup>
- Psoriasis / FH of psoriasis/AS / IBD / iritis if present
- Systemic symptoms eg weight loss
- Examination findings – restricted lumbar spine movements
- Investigations requested / results
- NASS symptom checker / SPADE questionnaire



# Can I get involved? A call for action

Join the NASS social movement for change to end diagnostic delay by simply:

- Referring patients with suspected inflammatory back pain to the new service / clinic under Dr Pendleton
- Visiting the NASS toolkit at <https://www.actonaxialspa.com/hcp-toolkit/> and use the resources for clinicians to help diagnosis of axial SpA
- Join the NASS peer to peer network to collaborate with other HCPs, share and learn lessons by [clicking here](#)

# Resources for clinicians

<https://www.actonaxialspa.com/peer-to-peer-network-and-hcp-toolkit/>



- SPADE tool [www.spadetool.co.uk](http://www.spadetool.co.uk)
- ASAS/EULAR updated guidelines <https://ard.bmj.com/content/early/2022/10/21/ard-2022-223296>
- NICE guidelines <https://www.nice.org.uk/guidance/ng65>
- MRI recommendations (UK)
- <https://doi.org/10.1093/rheumatology/kez172>
- <https://doi.org/10.1093/rheumatology/kez173>



# Resources for people with Axial SpA

- <https://nass.co.uk/resources/>
- NASS helpline for patients 0208 741 1515 and [asknass@nass.co.uk](mailto:asknass@nass.co.uk)
- NASS Branches <https://nass.co.uk/managing-my-as/in-your-area/>
  - Belfast branch in development
- Your SpAce <https://nass.co.uk/about-as/your-space/>
- My AS My Life <https://nass.co.uk/managing-my-as/my-as-my-life/>



# Your SpAce

<https://nass.co.uk/about-as/your-space>

New online programme for people with axial SpA to:

- Learn more about their condition
- Discover new ways to manage their symptoms
- Meet other people with axial SpA

Consists of:

- Short videos sharing information and lived experiences
- Downloadable resources to create a personalised toolkit
- Free monthly online meetups

Free to access on the NASS website from 10:30 Thurs 30 March 2023

[Order free promo packs](https://nass.co.uk/homepage/health-professionals/resources-for-your-patients/guides-to-living-with-axial-spa-as/) (postcards to hand to patients and A4 posters)

<https://nass.co.uk/homepage/health-professionals/resources-for-your-patients/guides-to-living-with-axial-spa-as/>



act on  
Axial SpA

# NASS resources for people with axial SpA

- For accessing information quickly
- Information on
  - Relationships
  - Intimacy
  - Family life

[www.nass.co.uk](http://www.nass.co.uk)

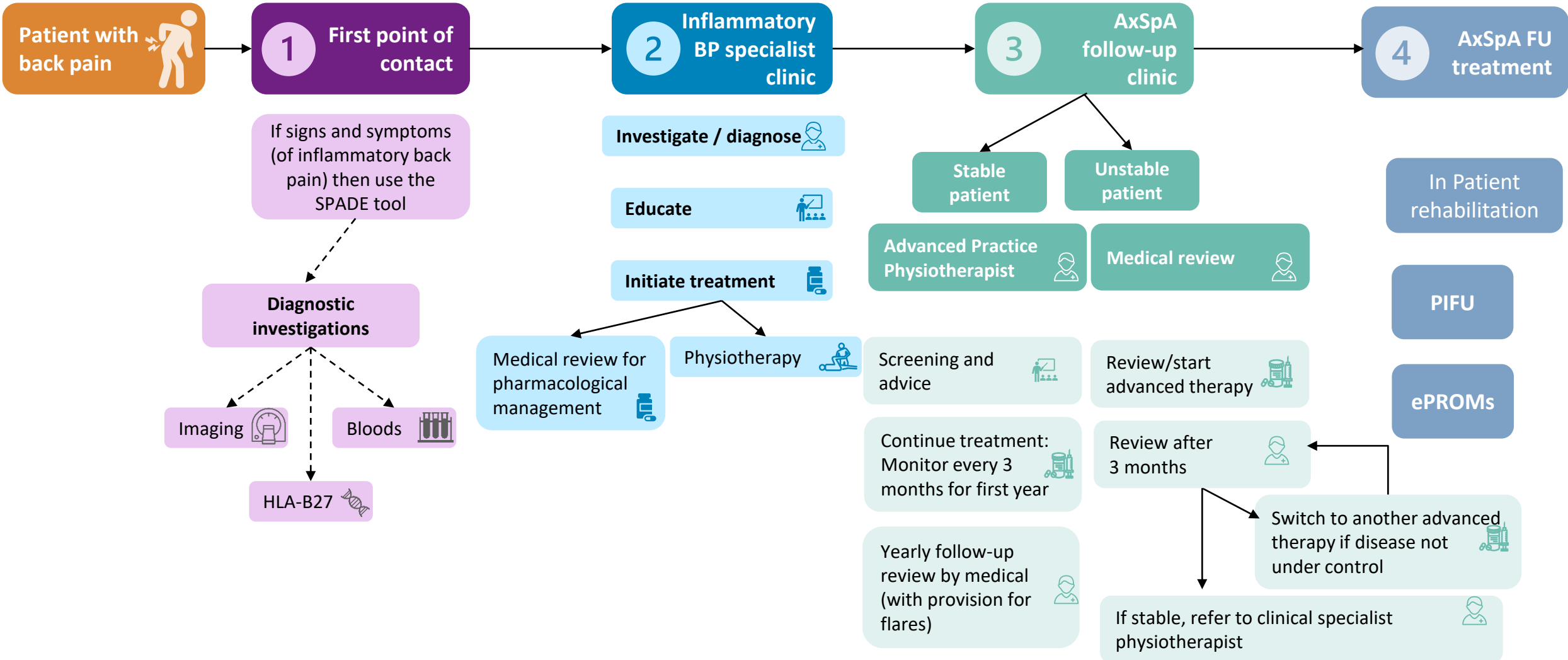
# NASS resources for people with axial SpA

## My AS, My Life

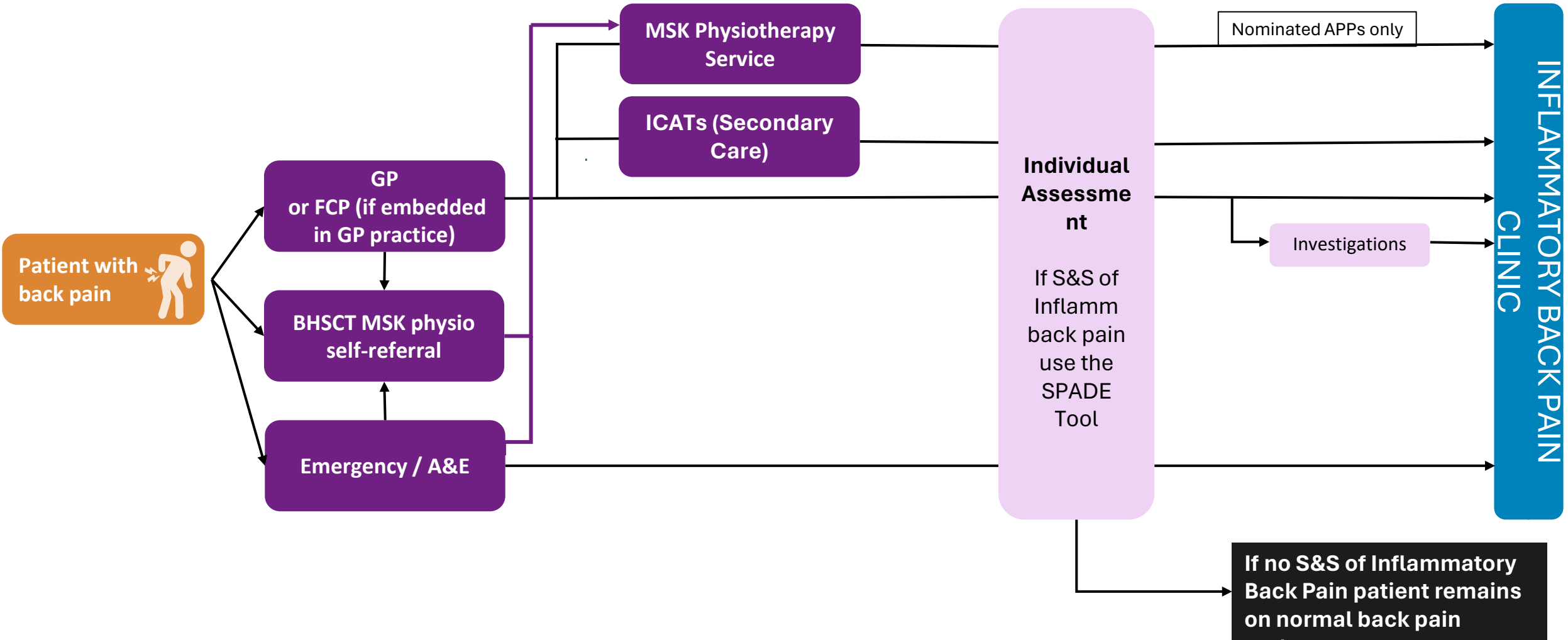
- Live sessions with expert speakers
  - Pain management
  - Emotional wellbeing
  - Exercise
- Downloadable exercise sheets
- Useful links
- Life hacks
- Build confidence and skills



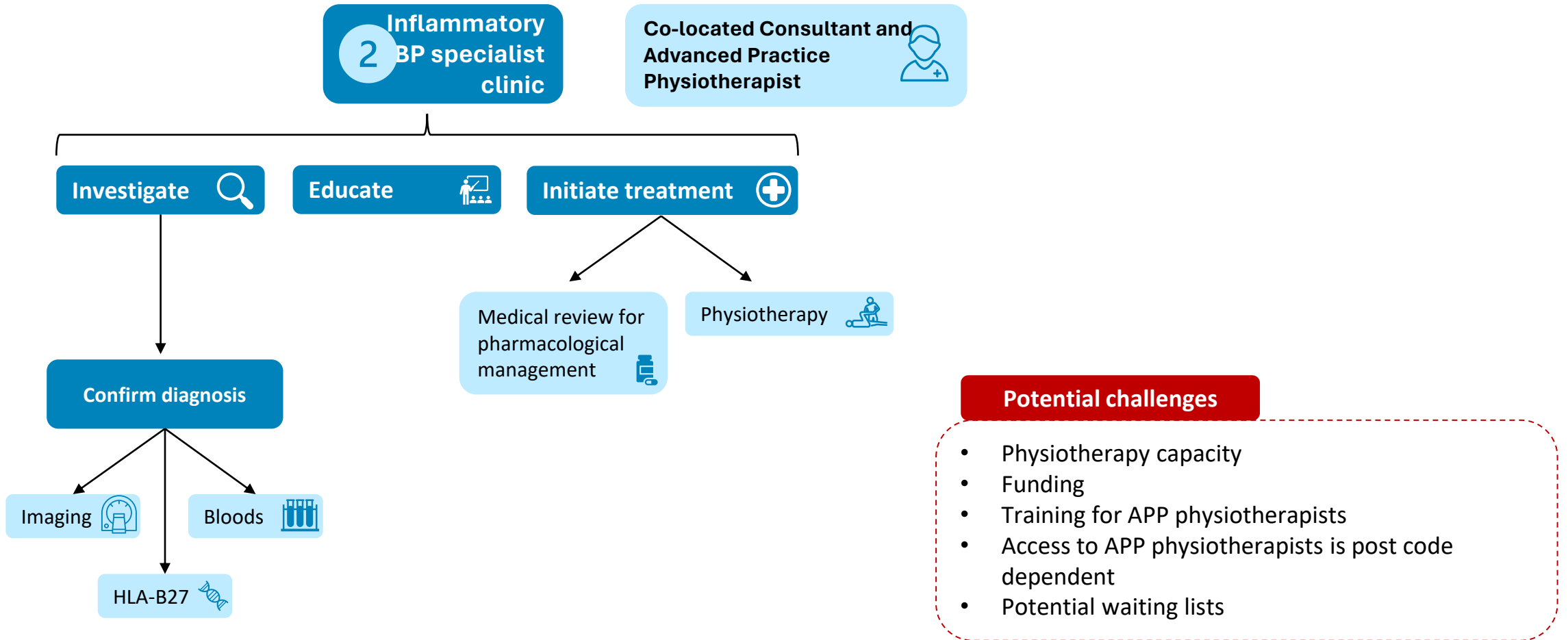
# Proposed Pilot Pathway



# Referral to the Inflammatory BP clinic

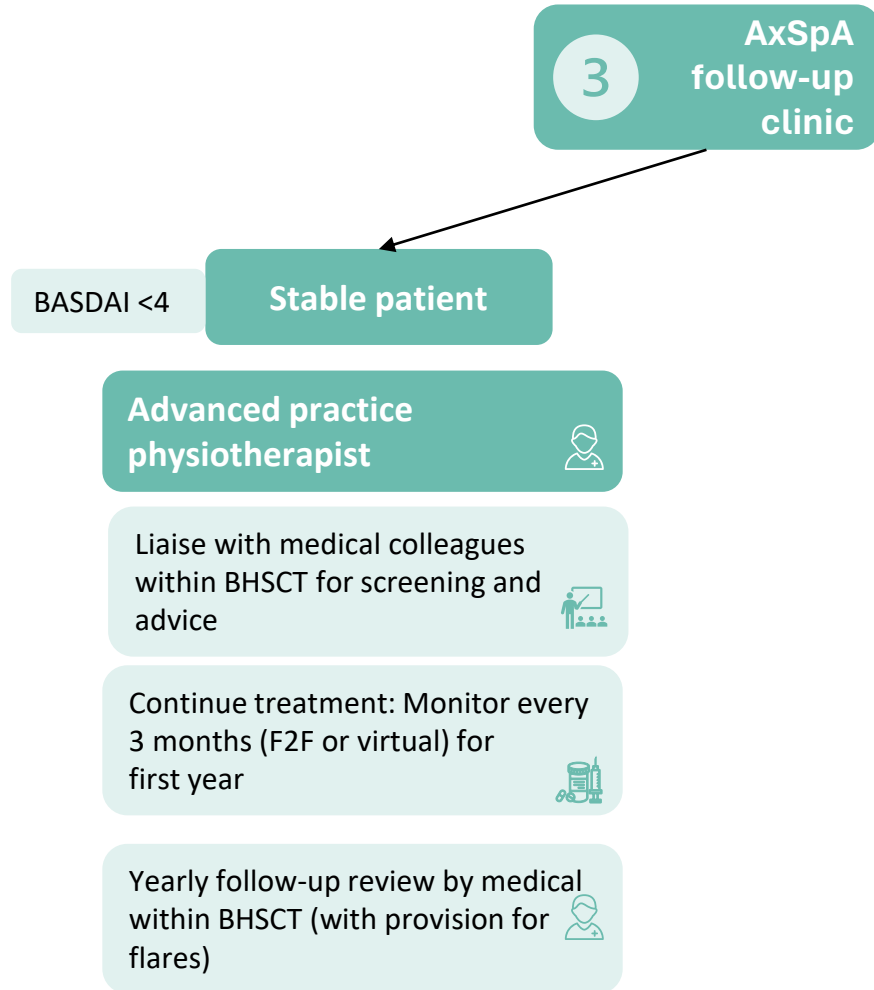


# Inflammatory BP Specialist Clinic



HLA-B27, human leukocyte antigen B27; IBP, inflammatory back pain.

# AxSpA follow-up clinic



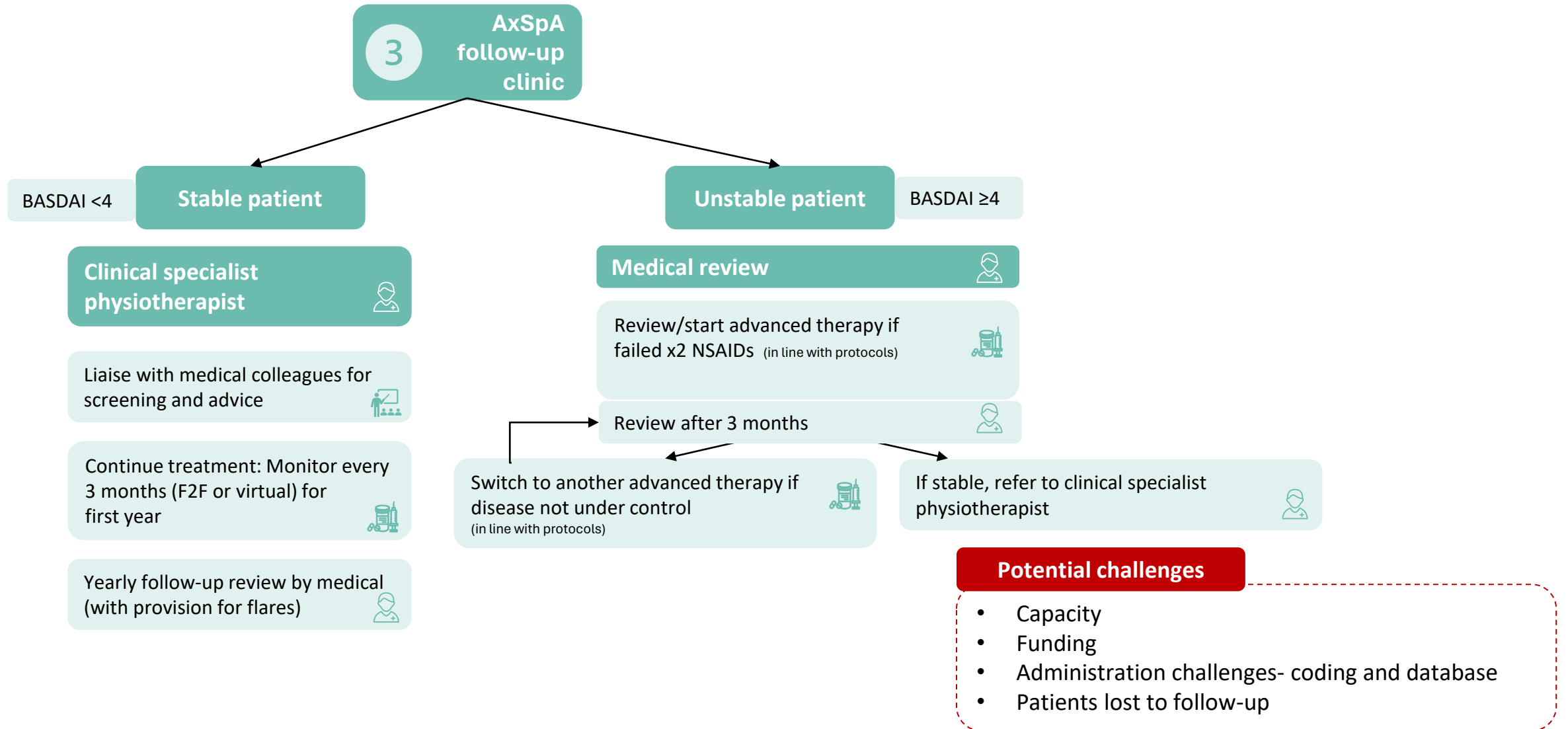
Need for MDT / Supervision  
Referral to Gastro/Derms/ Ophthalmology

## Potential challenges

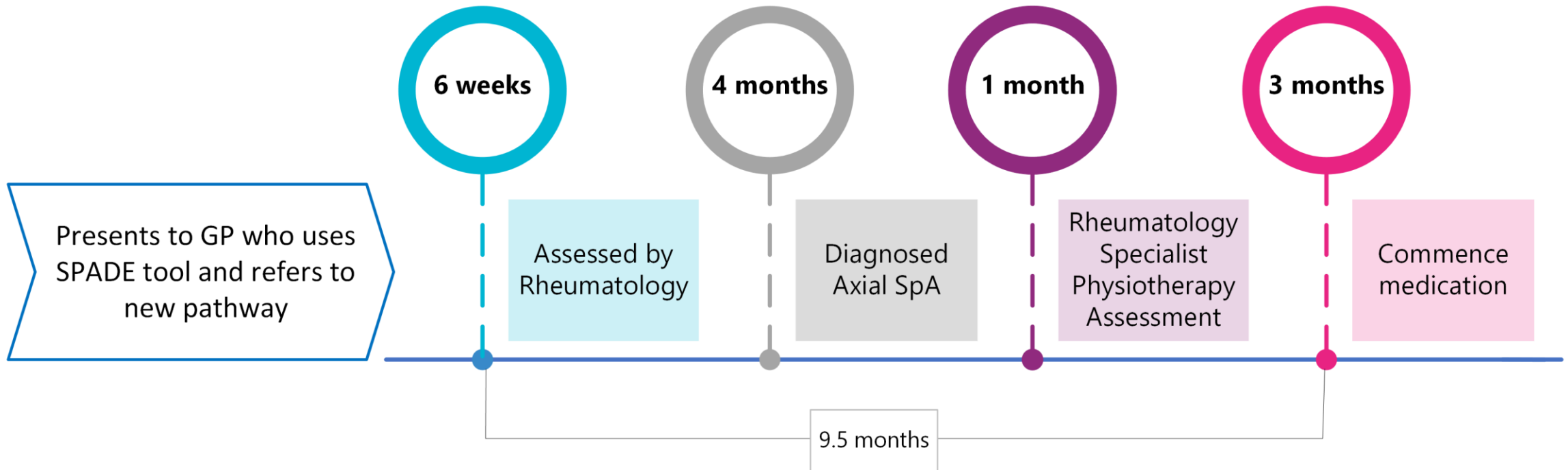
- Capacity: should this be separate from IBP clinic?



# AxSpA follow-up clinic



# Gold standard time to diagnosis of 1 year



# What can you do?



1 Identify these patients



2 Screen



3 Refer to pathway

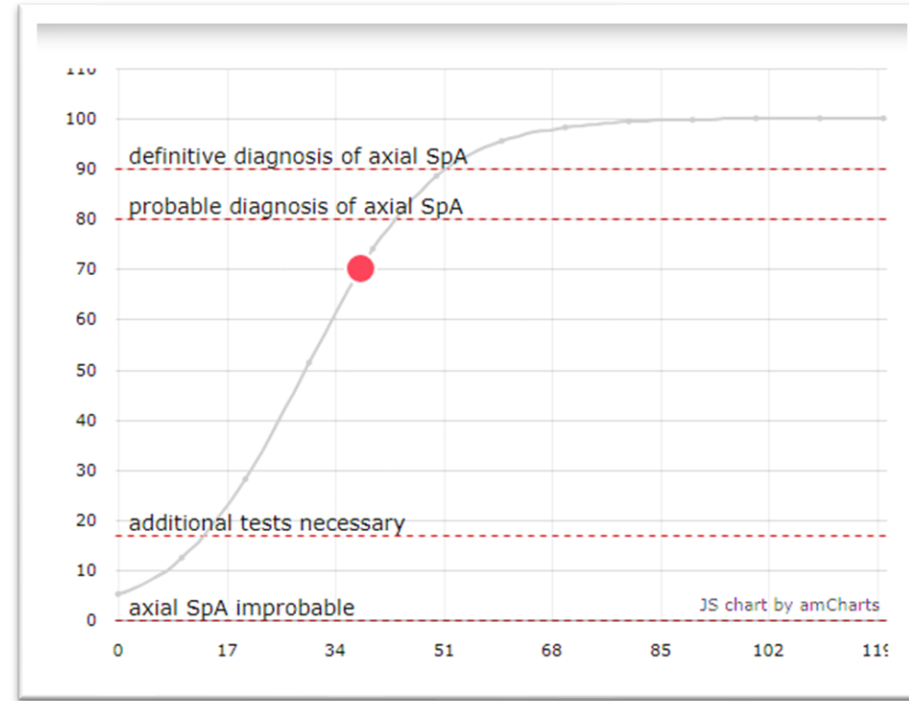


www.spadetool.co.uk

In your patient with chronic back pain, tick all the symptoms that apply to determine the likelihood of axial spondyloarthritis

- Inflammatory type of back pain
- Heel pain (enthesitis)
- Peripheral arthritis
- Dactylitis
- Iritis or anterior uveitis
- Psoriasis
- IBD (Crohn's disease or ulcerative colitis)
- Positive family history of axial SpA, reactive arthritis, psoriasis, IBD or anterior uveitis
- Good response to NSAIDs
- Raised acute-phase reactants (CRP/ESR)
- HLAB27
- Sacroiliitis shown by MRI

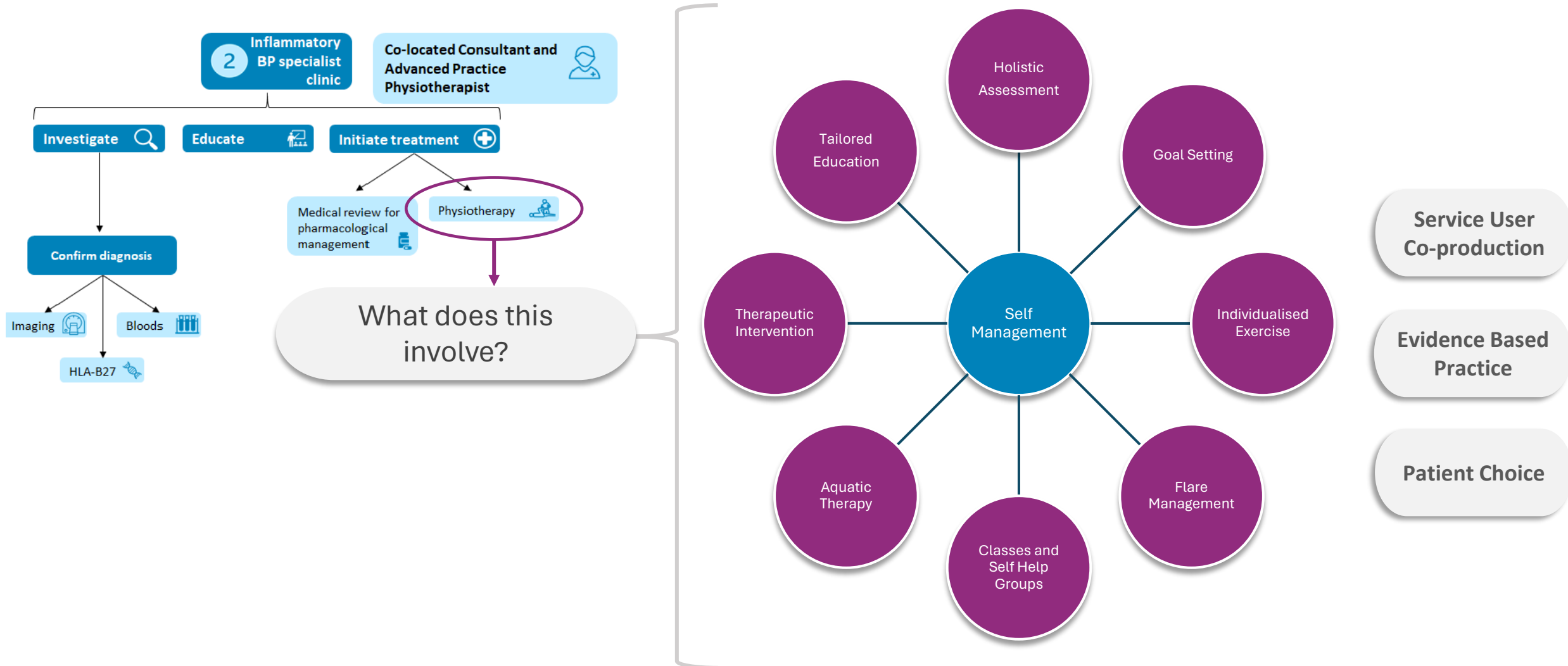
SHOW RESULTS



**Additional tests necessary**

This patient may have Axial SpA but further tests are necessary – assessment by a rheumatologist is recommended

# A fully integrated pathway



Thank you for listening

