

Joint Pain Advisory Clinic (JPAC)



Foot and Ankle Pain

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Joint Pain Advisory Clinic for Foot and Ankle Pain

The Joint Pain Advisory Clinic, or JPAC for short, is our way of getting you to the right clinician, at the right time, first time. For more information we recommend you watch our JPAC video on our website.

The JPAC makes use of the latest research for you to learn about your injury, explore self-care techniques and discuss the problems which may be contributing to your pain.

This booklet is designed specifically for those people suffering from foot or ankle pain.

Pain is unique and individual to you. During the JPAC you will meet with others who are experiencing similar problems which can help in supporting you during your ongoing treatment. For us to understand your experience to date we suggest you work through this booklet before you come to the JPAC.

Your Foot or Ankle Pain

Status on foot or ankle pain (Circle, tick or write)		
Typical age range	Less than 18 18-40 and over	
Location of pain	Big toe smaller toes ball of foot heel side of ankle back of ankle arch of foot	
Type of pain	Sharp dull ache catching shooting throbbing	
Frequency of pain	Under 1 hour 1-4 hours a day 4-12 hours constant	
Daily pain pattern	Morning pain Y/N Pain in day Y/N Pain in evening Y/N Pain through night Y/N	
Pain	No pain 0 1 2 3 4 5 6 7 8 9 10 Worst pain	
Associated symptoms	Stiffness weakness clicking limping crepitus stiffness swelling heat	
What makes it feel worse?	Walking standing running twisting stairs barefoot	
What makes it feel better?	Rest ice heat paracetamol ibuprofen sitting lying walking supportive footwear	

In our experience patients are better equipped to fully answer questions regarding their problem during their second or third session. The time between sessions is thought to help clarify the answers to our questions.

To guide your treatment at the time of your JPAC, it is important that you are able to answer some questions. The following section will allow you to work through some of these questions at your own pace, prior to your JPAC.



How long have you had your pain?

Our experience shows that foot and ankle pain comes about in a sudden manner from a slip, trip or sudden movement or it slowly builds and gets worse over a period of weeks, months and even years. Answering these questions can help us work out whether you have an inflammatory problem or whether you have a common wearing problem.

	How many?
Weeks	
Months	
Years	

Associated symptoms

Pain is the number 1 complaint we see in clinic. However, it is likely you have other symptoms such as stiffness, weakness, catching etc.

Use the box to list all your other symptoms and when you experience them.

What happens	When does it happen	Tick when symptom has gone	Date
i.e. Shooting pain	When I stand up from a chair		

From time to time you should revisit this list and see which symptoms are improving.



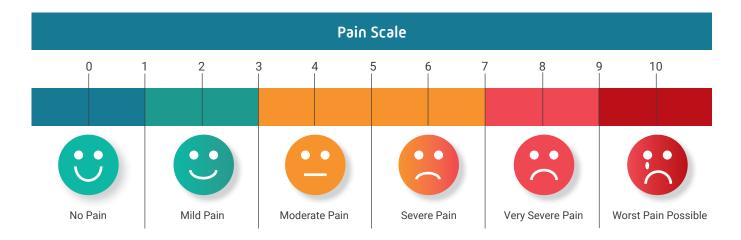
What brings on your pain or makes your foot or ankle feel worse?

It is understandable to be cautious or avoid certain movements, positions and activities when you are in pain. Understanding what irritates your foot or ankle enables you to modify your day to day activities.

Write down in the box all the things which aggravate your foot or ankle.

What hurts	For how long	Pain Scale (Use scale below)	Does the pain stop if you stop
i.e. Walking	5 minutes	4/10	Yes

This list is a great way to measure recovery as you review it in the coming weeks.



What makes your foot or ankle feel better?

The obvious advice from this question is 'do more'. If you know of something which makes your foot or ankle feel better, then we encourage you to continue with this. Write down what does make your foot and ankle feel better.

What helps?	For how long?	How often can you do this?
i.e. Swimming	Helps for 4 hours	Once a day

Next time you are in pain you could use this as a reference to make sure you are doing everything you can to reduce your pain.



Understanding the Foot and Ankle

At Healthshare we encourage you to be curious about your foot or ankle pain and what structures in and around your foot and ankle might be involved. The first part in exploring your complaint is to understand the basic workings of the foot and ankle.

The foot is a very complex part of your body, containing many bones and soft tissue. It is useful to think of the foot and ankle as two entities, the forefoot and the rearfoot.

The Forefoot

The forefoot propels you forwards during movement and provides strength and structure to foot with the attachment of soft tissue, such as the plantar fascia.

The forefoot contains the toes and the longer bones of the foot, called metatarsals. The size, position and strength of the big toe (the Hallux) makes it one of the most important structures of the foot.

The Rearfoot

The rearfoot refers to the area of the foot from your heel to just below your ankle.



Bones and Joints

The foot and ankle has 28 bones, including the bones of your shin. A joint is where two or more bones meet and enable movement.

Due to the number of joints, the foot and ankle is a very mobile part of our body, requiring a large degree of stability and control.



Cartilage

The ends of each bone is covered in a smooth, hard coating called cartilage.

This allows the joint surfaces to glide on top of each other with very little friction.



Ligaments are the 'guide-ropes' that join bone to bone (to create a joint). They stretch enough to allow movement to occur within a joint but excessive movement is prevented as the ligaments stretches further and further.

The picture beside shows the amount of ligaments in the foot and ankle. Here you can see the 3 ligaments on the outside of your ankle that prevent you rolling over your ankle.

Fluid

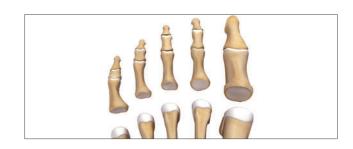
Filling the space within the joint is a lubricating jelly called synovial fluid, produced by a thin lining on the inner side of the ligaments.

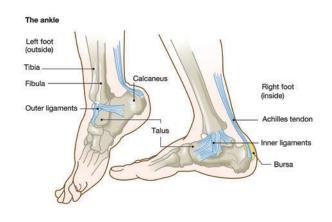
Muscles and Tendons

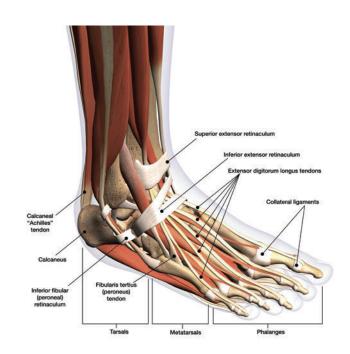
The structures mentioned above should be thought of as the mechanical parts that allow movement within the foot and ankle. In order to actively produce movement, we require the help of muscles and tendons.

Tendons are the strong, white rope-like structures that anchor each end of a muscle to a bone. Movement is created at a joint when a muscle pulls the bones of the joint closer together.

The muscles of the foot and ankle have many roles including creating support for the arch of your foot and the stability of your ankle. The larger muscles such as your calf muscle (gastrocnemius) provide explosive forces to propel us forward when we walk.





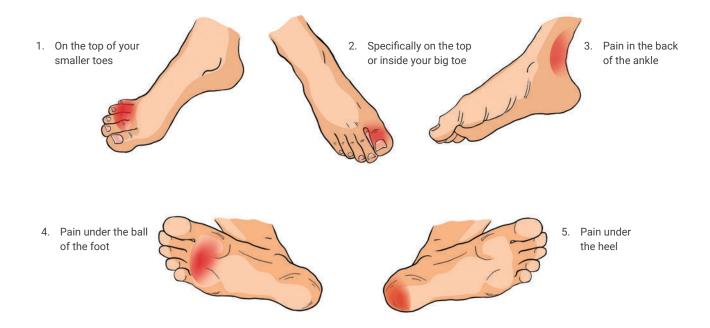




Pain

Pain is complex and different for every person. Your foot or ankle pain is likely caused by an problem with the bone, cartilage, nerve, ligament, muscles, tendon, bursa or a combination of these structures.

Where do you get your foot or ankle pain?



Understanding these pain patterns allows us to start building a picture of what your foot or ankle problem is and what structures could be affected.

Take home message



- 1. Foot or ankle pain is a very common problem.
- 2. Most foot or ankle pain will improve with time, if it is managed appropriately.
- 3. In the meantime it may help to modify your activities, wear supportive footwear and take pain relief.
- 4. Exercises will also help your foot or ankle pain get better.
- 5. It is good to remain active while you wait for your foot or ankle to improve.



If your foot or ankle does not improve as expected we will be able to discuss other treatment options with you at the 8 week follow up appointment.



Pain from long term use

From the moment we are born our bones, ligaments, muscles, tendons and cartilage adapt in a response to what we ask of our bodies. This process can simply be thought of as one of "wear and repair".

The process of 'wear and repair' allows the cartilage within our joints to adapt to our activity levels, which change throughout our lifetime. This process is imperative for our development and for much of our life will cause no pain.

Osteoarthritis occurs when the rate of cartilage 'repair' is surpassed by the irreversible rate of 'wear', over a prolonged period. This results in the loss of some of the qualities that make cartilage smooth and hard, which affect how the foot and ankle functions.

Nevertheless. osteoarthritis only describes the process of prolonged 'wear and repair'. It is not always associated with pain or symptoms such as aching, swelling and stiffness. If you are suffering from pain associated with osteoarthritis there are many options available to you to break the cycle of pain.

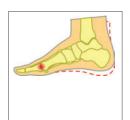
Bunion (Hallux Valgus)

Can be due to movement of bones that make up the big toe joint. Often the big toe joint becomes prominent and there may be a visible bump present. This can also affect the lesser toes leading to hammer toes and create difficulty with finding footwear that fits properly. The same symptoms but around the little toe joint is called a Tailor's Bunion.



Stiff Big Toe (Hallux Limitus)

This is where there is reduced movement of the big toe joint. It can cause pain in the joint when your foot pushes forward or it can cause extra pressure on two small pea-sized bones under the ball of the foot called sesamoids.



Typical age range	40+
Location of pain	Over the foot and ankle
Type of pain	Achy/stiff
Daily pain pattern	Stiff on first movement, pain on weight bearing
Pain levels	Low-medium
Associated symptoms	Changes in walking
What makes it feel worse?	Increased weigh bearing
What makes it feel better?	Rest





Typical age range	Any
Location of pain	Big toe joint
Type of pain	Achy and sharp pain
Daily pain pattern	Pain on , residual pain from the day at night - throbbing pain
Pain levels	Low-medium
Associated symptoms	Difficulty putting shoes on 2nd toe problems
What makes it feel worse?	Tight shoes/heels
What makes it feel better?	Accommodating footwear, no pressure on the joint and shoes with a structured sole

Typical age range	18+
Location of pain	Big toe joint
Type of pain	Achy/sharp/constant
Daily pain pattern	Changes in walking
Pain levels	Low-medium
Associated symptoms	Changes in walking
What makes it feel worse?	Tight flexible footwear/heels
What makes it feel better?	Accommodating structured soled shoes



Hammer toes

Affects the smaller toes (2-4) causing the toes to elevate and rub on footwear or causing hard skin to develop underneath the foot. This can also create difficulty in finding footwear that fits properly.



Impingement

Impingement of the ankle can occur at the front or back. It is often associated with a feeling of weakness, stiffness and pain. Sometimes patients report the need to 'free' their ankle which can result in short term improvement in pain levels.



Ligament problems

Injuries to ligaments are very common and often require a sudden accident like a slip, twist, trip or fall to damage a ligament.

The most commonly affected ligaments in the foot and ankle are the ligament on the inside and outside of the ankle.



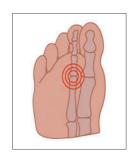
Ligament injuries respond very well to exercise. A typical programme would focus a period of rest followed by slowly increasing your activity.

Exercise programmes should be gradual and move from simple range of movement and muscle activation exercises through to muscle endurance, strength and power exercises.

It is not uncommon for a ligament problem to take 2-6 months to recover. The vast majority of patients do not require a scan and fewer patients are referred for surgery.

Capsule irritation (Capsulitis)

In some instances the whole series of ligaments can become inflamed around a joint. Most commonly seen at the base of the second toe as pictured. If left untreated it can result in dislocation of the toe.



+ - 1	
Typical age range	Any
Location of pain	2-4 digits
Type of pain	Achy/sharp
Daily pain pattern	Pain in footwear
Pain levels	Low-medium
Associated symptoms	Callus/breakdown/ulcer
What makes it feel worse?	Tight footwear
What makes it feel better?	Accommodating footwear, cushioning

Typical age range	Any
Location of pain	Front or back of ankle joint
Type of pain	Sharp/stabbing/burning/tingling
Daily pain pattern	Activity dependent
Pain levels	Low-medium
Associated symptoms	Changes in walking
What makes it feel worse?	End of range of movement
What makes it feel better?	Rest

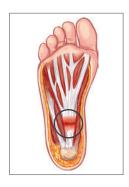
Typical age range	Any
Location of pain	Inside or outside of ankle
Type of pain	Sharp/achy/throb
Daily pain pattern	Activity dependent
Pain levels	Medium-high
Associated symptoms	Swelling initially and bruising
What makes it feel worse?	Increased activity or re-injury
What makes it feel better?	Strengthening exercises, wearing supportive structured footwear

Typical age range	18+		
Location of pain	Around the 2nd toe joint		
Type of pain	Sharp/achy		
Daily pain pattern	Pain on weigh bearing		
Pain levels	Low-medium		
Associated symptoms	Swelling		
What makes it feel worse?	Hard soled tight footwear/heels		
What makes it feel better?	Structured soled accommodative footwear		



Heel and Sole pain (Plantar Fasciitis)

The most common cause of foot pain and reason for referral to a healthcare professional, it can be unilateral (in one foot) or bilateral (in both feet) with Plantar Fasciitis/ Fasciopathy accounting for 80% of cases of heel pain. You may tend to notice it more when getting up in the morning or after periods of rest.



Typical age range	16+		
Location of pain	Under the heel		
Type of pain	Dull ache to sharp acute pain		
Daily pain pattern	Pain on first steps which eases, then increases on increased		
Pain levels	Medium		
Associated symptoms	Changes in walking		
What makes it feel worse?	Flat hard soled footwear		
What makes it feel better?	Regular mobilisation of foot before standing after resting, stretching of calf muscles and strengthening of plantar muscles. Wearing supportive structured soled fastened accommodating footwear		

Nerve Pain

Paint at the front of the foot caused by a squeezing of the nerve that runs to toes 2-4. This can often lead to removal of footwear to help ease symptoms. Patients often report the sensation of walking on a stone or pebble with some tingling or numbness in the toe itself.



Typical age range	18+	
Location of pain	Middle of the foot being the long bones	
Type of pain	Sharp shooting, stabbing, burning with numbness of 3 and 4 digits	
Daily pain pattern	Worse in footwear	
Pain levels	Low-medium-high all	
Associated symptoms	Change in walking due to pain	
What makes it feel worse?	Tight footwear, walking on hard surfaces	
What makes it feel better?	Accommodating footwear	

Painful tendons

The foot has a number of tendons attaching into it allowing the intricate movements that occur in the font, middle and back of the foot. As these tendons such as the Achilles (back of the ankle), posterior tibial (inside of ankle), peroneal (outside of ankle), anterior tibial (top of ankle)



and extensor tendons (top of foot) handle forces every day, sometimes they can become irritated causing pain, stiffness and difficulty with complete weight bearing through the foot.

Typical age range	Any	
Location of pain	Under foot, inside or outside of ankle, back of the heel	
Type of pain	Achy pain	
Daily pain pattern	Pain on	
Pain levels	Low-medium-high all	
Associated symptoms	Change in walking, stiffness	
What makes it feel worse?	Increased use	
What makes it feel better?	Strengthening tendon, ice area, supportive soled footwear	

Foot and/or Ankle Instability

Weak foot & ankle muscles could also lead to abnormal stress to your foot/ankle when you use them. Over a period of time this may lead to irritation of the muscles, tendons, ligaments, bursa or the joint causing inflammation and pain. Over time, weakness in your muscles may not cause any pain but you might be able to feel initial low level pain.



Do I need a scan?

Within the NHS, scans and diagnostic images are rarely used in the diagnosis and treatment of your foot or ankle pain. X-ray, ultrasound and MRI scans have been shown to be poor at diagnosing many problems including osteoarthritis, cartilage issues, strains or tendon problems. What you tell us is more important for guiding your treatment.

Podiatrists at Healthshare use questions, movements and face-to-face tests to understand what is causing your foot or ankle pain and the vast majority of pain improves with exercise and changes to activity and lifestyle.

What if my pain doesn't improve?

If you have not benefited from treatment at Healthshare you may be referred on to discuss your options. They will assess whether the information from a scan outweighs the associated risks of having a scan, such as exposure to radiation.

Therefore, a scan will only be requested if it is believed the results of the scan would alter the treatment offered to you. For the majority of patients it will not - which is why they tend to be offered once all conservative treatment options are exhausted.





Start to feel better with these options

When it comes to your pain, you are in control. The image below shows the options available to you in the recommended order you should follow. In order to find the right treatment, you must progress from top bottom.

Self Care

Self-management information leaflets, websites, community groups, mobile applications

Advice & Education

Weight loss, lifestyle changes, simple analgesics, topical agents, increase activity, sleep hygiene

Podiatry guided functional exercises and stretches, footwear advice, prescribed NSAIDs/analgesics

Hospital referral injection Surgery

Where shall I start?

Initial management includes:

- 1. **Education** Understanding your pain is key.
- **2. Taking appropriate pain relief** will help to keep you active which is key to achieving relief from pain.
- 3. Podiatry (Exercises, footwear education and self help advice).
- 4. Changing habits alter the pain provoking activities to reduce pain.
- Maximising physical activity, fitness, maintain healthy body weight, addressing smoking and alcohol consumption, improving sleep hygiene and ensuring emotion well being.

For most people this is all that is needed to reduce their pain.



Exercise Advice

Exercise is an important part of the management of pain, whether it is it to improve your joints range of movement or how your muscles control your joint.

- If your problem is associated with stiffness your exercise programme will target improving your mobility.
- If your problem is associated with weakness your programme will focus on improving your strength and control.
- Often we see both stiffness and poor muscle control of a joint so your clinician may prescribe exercises to combat both.

How do I monitor my exercises?

The amount of exercise you can do may well depend on the amount of pain you're in. It's okay to exercise, even when you have pain it's likely to decrease your symptoms.

However, you should be mindful if you're in more pain after finishing exercise.

How hard should I push?

- Everybody is different and some exercise will work for you whilst others might not. Do more of what feels good.
- Find a level that you can currently do gradually try and do more.
- Little and often is often better in the early stages, especially if you're very sore.
- As the exercises get harder you may wish to do them less often to allow your body time to recover (e.g. from two times a day to 3 to 4 times a week).

Use a traffic light to guide the intensity and frequency of your exercise.

Pain during exercise More than 6 out of 10 Too much Pain stays after exercise for more than a few hours Pain settles within a hour after exercise Pain settles quickly after exercise

Footwear

- Footwear is key in helping your pain improve and eventually get better
- Footwear needs to give your foot a stable base when walking and some cushioned footwear can make your foot unstable
- A structured and supportive sole helps absorb some of those ground reaction forces
- Footwear needs to have a good heel cup for support of your heel, a heel drop, a fastening such as laces
- There needs to be at least 1cm gap between the tip of your longest toe and the end of the shoe.



Exercises

Rolling the Sole of the Foot



Description

- 1. Place the arch of your foot on a frozen water bottle or can on floor
- 2. Roll your foot forwards and backwards, applying firm pressure but avoiding pain
- 3. You must wear socks and stop if your foot becomes numb

Sets: 5--10 minutes Sets: 2-3 times a day

Ankle Rotations









Description

- 1. In a seated position lift the foot off the floor
- 2. Try not to move the knee or hip while circling the ankle joint
- 3. Try writing the alphabet or your name in the air
- 4. Repeat on both sides if necessary

Sets: 3-4 a day Reps: 2 x alphabet

Soleus Stretch



Description

- 1. Place one foot in front of the other in a split stance with a slight bend in both knees
- 2. Keeping your feet on the ground move your front knee forwards, keeping the heel of the back leg down
- 3. Hold in this position
- To generate a stronger stretch place your hands on a wall in front and learn further forwards on your front leg

Sets: 3-4 a day

Time: Hold for 30 seconds

Gastrocnemius Stretch



Description

- 1. Place one foot in front of the other in a split stance with the back knee straight
- Keeping your feet on the ground move your front knee forwards, keeping the heel of the back leg down
- 3. Hold in this position
- To generate a stronger stretch place your hands on a wall in front and learn further forwards on your front leg

Sets: 3-4 a day

Time: Hold for 30 seconds

Heel Raise





Description

- 1. Stand with good posture (hold onto a wall if required)
- 2. Raise up onto your toes, hold and lower your heels to the floor
- 3. To make this exercise harder place a towel under your toes

Sets: 3

Reps: 10-15 reps Times a week: 3-4



What else can help your pain



1. Activity Modification and Pacing

- Modify tasks to help reduce factors that aggravate your pain. E.g. step towards something as opposed to reaching for it.
- Break activities into smaller chunks and if you need to plan your day to day activities.

2. Relative Rest

 In some cases we need relative rests to reduce the load on the body. However try to avoid complete rest or avoiding moving the painful joint completely.

3. Sleeping Positions

- Try lying with pillows supporting the area of pain.
- Pillows between the knees and under the arm can be useful if you sleep on your side.
- If you lie on your back try placing pillows underneath your feet and avoid covering your toes with a duvet if this is painful.

4. Ice and Heat

- Applying ice or heat to the area can help alleviate some of your symptoms.
- Do you not apply for more than 15 minutes at a time.
- Protect the skin by applying through a protective barrier such as a small towel.

5. Pain Relief

- Take pain relief regular advised by your GP rather than as and when required.
- If you're not taking pain relief and feel you need it, in the 1st instance you should discuss over-the-counter medication with your pharmacist.
- If your pain is not helped by over-the-counter medication discuss other options with your GP.
- Always check with your GP/pharmacist before taking any medication.

6. Other Factors

- Stress, anxiety, mood, depression, fatigue/sleep disturbance.
- Routine if something works keep doing it.



Healthier lifestyles

Our bodies are designed to be active. Physical activity not only enables you to manage daily tasks, it also helps your body function in other ways.

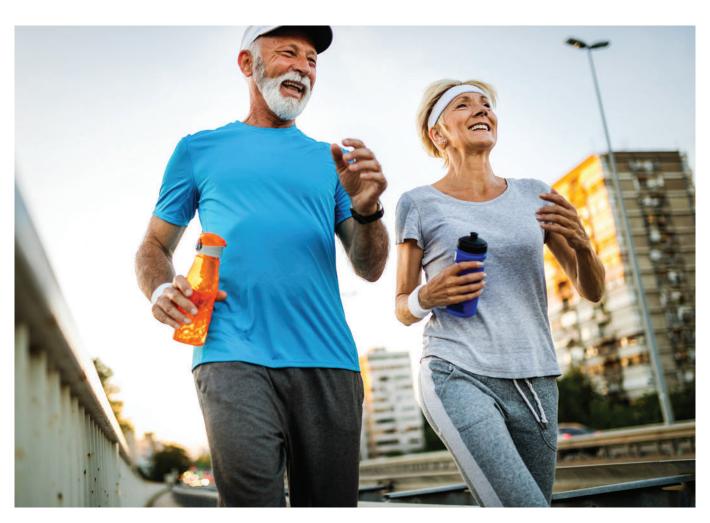
Physical activity can: -

- Decrease stress
- Decrease anxiety
- Increase sleep quality
- · Increase energy levels
- Increase the release of pain reducing hormones, such as endorphins

The NHS recommends that adults do at least 2 1/2 hours of moderate exercise a week to manage problems with the joints and muscles. This might include: -

- Brisk walking
- · Cycling
- Dancing
- Hiking
- · Mowing lawn
- Riding a bike
- Rollerblading
- Tennis
- Water aerobics
- Swimming

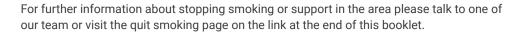
If you struggle with exercise then you're not alone. Understanding the barriers to leading a healthier lifestyle is the first part in making a positive change.





Stop Smoking

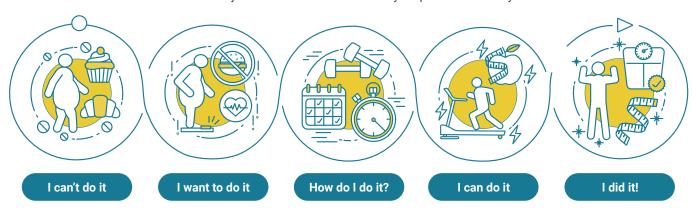
Smoking slows down the healing process and leads to the deterioration of your bodies systems. Stopping smoking will help your body recover quicker and decrease your pain, leading to you being able to enjoy an active lifestyle again.





Weight Loss

There are many reasons why maintaining a healthy weight is good for you. Besides reducing the pressure on the joints, having extra fat can increase inflammation in the joints and as a result increase your pain and recovery times.



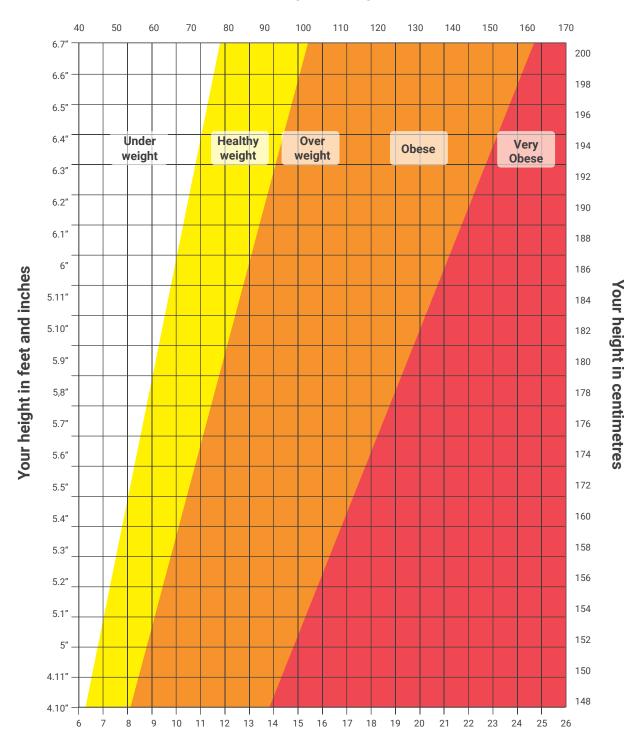




Body Mass Index (BMI)

The body mass index is a measure that uses your height and weight to work out if your weight is healthy. Use the chart to the right to work out if you are a healthy weight. The chart is only to be used by those older than 18 years of age.

Your weight in kilograms



Your weight in stones



Making changes

You may be wondering how you can make some of the changes that we've talked about. Adding regular exercise into your life when moving hurts can be a big challenge.

Thinking about adding something else into a busy life can also seem like too much. However, you can get over these hurdles and make positive changes.

Before making a plan

It's useful for you to explore your reasons for change prior to making a plan. Try answering some of these questions:

Question
What change do you want to make? Keep it simple!
Why?
Nilhot appell atoms and you take?
What small steps can you take?
What would help you?
What obstacles might get in the way?
How might you overcome obstacles?



Goal setting

Now that you might have a better understanding of the change that you are about to make, let's set some GOALS.

Goals are an important way of deciding what we want to achieve, and by when. They let us know when we have been successful.

When a change seems too big, having goals that break the change up a bit, help us feel good about the changes we are making, even if we have a way to go until we've got to our final destination.

Goals should be manageable. There is no point in setting yourself up to fail. They should follow the SMART rule:

WARNING - Do not be too ambitious, we want you to succeed.

Have a look at the example below (this is not something you need to do though!).







Now why don't you have a go at setting some SMART goals. Try to make them relevant to the problem with your foot or ankle or simply things that will lead to you making one of the changes we have discussed earlier in this brochure.

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Barriers to change

There are many barriers to change and so it's a good idea to think about what these might be for you and how you plan to get over them.

Remember a barrier isn't always physical. They can often be our own thoughts and beliefs that affect our ability to overcome the barrier.

Think about your own personal barriers to change.





Breaking Barriers

Below you will find a problem-solving tool to help you explore your barriers for success. We encourage you to use the tool to help improve your physical health.





Injections and Surgery

Injections

Injections are not recommended by the NHS for the majority of foot and ankle problems. Some foot and ankle problems do benefit from a steroid injection, however they are rarely a long-term solution and do have risks associated with them.

If you are struggling to engage with your rehabilitation you should discuss your options with your clinician.

Surgery

Surgery is indicated for very few foot and ankle problems. To be considered for surgery you will have experienced very little benefit from exercise and lifestyle changes.

If routine treatments have not worked for you and you are ready to consider surgery you should speak to one of our clinicians at your JPAC.



Take home message



- 1. Foot or ankle pain is a very common problem.
 - 2. Most foot or ankle pain will improve with time, if it is managed appropriately.
 - 3. In the meantime it may help to modify your activities, wear supportive footwear and take pain relief.
 - 4. Exercises will also help your foot or ankle pain get better.
 - 5. It is good to remain active while you wait for your foot or ankle to improve.

If your foot or ankle does not improve as expected we will be able to discuss other treatment options with you at the 8 week follow up appointment.



