What is arthritis?
Arthritis is a group of conditions that cause damage to one or more joints. Your surgeon has recommended an ankle arthrodesis operation to fix the bones in your ankle together. However, it is your decision to go ahead with the operation or not. This document will give you information about the benefits and risks to help you make an informed decision. If you have any questions that this document does not answer, you should ask your surgeon or any member of the healthcare team.

How does arthritis happen?
The most common type of arthritis is osteoarthritis, where there is gradual wear and tear of a joint. In some cases this is the result of an injury, but in others it happens without a known cause. Some other types of arthritis are associated with inflammation of the joints that can eventually lead to severe joint damage. The most common inflammatory arthritis is rheumatoid arthritis. Arthritis eventually wears away the normal cartilage covering the surface of the joint and the bone underneath becomes damaged. This causes joint pain and stiffness, which can interfere with normal activities.

What are the benefits of surgery?
If your ankle arthrodesis is successful, you should have less pain and be able to walk better.

Are there any alternatives to ankle arthrodesis?
Simple painkillers such as paracetamol and anti-inflammatory painkillers such as ibuprofen can help control the pain of arthritis. Supplements to your diet, such as cod liver oil or glucosamine, may also help relieve your symptoms. You should check with your doctor before you take supplements. Using a walking stick on the opposite side to the affected ankle can make walking easier. A plastic splint or stiff ankle boot with a cushioned heel can help to make walking more comfortable. Regular moderate exercise can help to reduce stiffness in your ankle. Physiotherapy may help to strengthen weak muscles. A steroid injection into the ankle joint can sometimes reduce pain and stiffness for several months. You may get side effects if you have injections too often. A keyhole operation (arthroscopy) to clean out the ankle joint can give some relief for six to twelve months. This is a lower-risk procedure than an ankle arthrodesis. All of these measures become less effective as your arthritis gets worse and this is when your surgeon may recommend an ankle arthrodesis. Some people with ankle arthritis can have an ankle replacement instead of an ankle arthrodesis. Your surgeon will discuss with you if this is an option in your case.

What will happen if I decide not to have the operation?
Arthritis of the ankle usually, though not always, gets worse slowly. Arthritis is not life-threatening in itself but it can be disabling. Arthritis symptoms can be worse at some times than others, particularly when the weather is cold.
What does the operation involve?
A variety of anaesthetic techniques are possible. Your anaesthetist will discuss the options with you and will recommend the best form of anaesthesia for you. The operation usually takes between an hour and an hour and a half.
Ankle arthrodesis involves removing the surfaces of the ankle joint and fixing the bones together with screws (see figure 1). With time, the bones will join together so that the ankle does not move at all.

There are many different ways of performing the operation. Sometimes your surgeon can use keyhole surgery, but often they will need to make one or more larger cuts in the skin.
At the end of the operation, your surgeon will close the skin with stitches or clips and put your leg in a plaster cast.

What should I do about my medication?
You should continue your normal medication unless you are told otherwise. Let your surgeon know if you are on warfarin or clopidogrel. Follow your surgeon’s advice about stopping this medication before the operation.
If you are on anti-inflammatory painkillers such as ibuprofen, you should avoid taking them after the operation. These drugs may stop the bones joining together properly.

What can I do to help make the operation a success?

• Lifestyle changes
If you smoke, try to stop smoking now. Stopping smoking several weeks or more before an operation may reduce your chances of getting complications and will improve your long-term health. Your ankle arthrodesis is much less likely to be successful if you smoke.
For help and advice on stopping smoking, go to www.gosmokefree.co.uk.
You have a higher chance of developing complications if you are overweight.
For advice on maintaining a healthy weight, go to www.eatwell.gov.uk.
• Exercise

Regular exercise can reduce the risk of heart disease and other medical conditions, improve how your lungs work, boost your immune system, help you to control your weight and improve your mood. Exercise should help to prepare you for the operation, help with your recovery and improve your long-term health. For information on how exercise can help you, go to www.eidoactive.co.uk. Before you start exercising, you should ask a member of the healthcare team or your GP for advice.

What complications can happen?

The healthcare team will try to make your operation as safe as possible. However, complications can happen. Some of these can be serious and can even cause death. You should ask your doctor if there is anything you do not understand. Any numbers which relate to risk are from studies of people who have had this operation. Your doctor may be able to tell you if the risk of a complication is higher or lower for you.

The complications fall into three categories.

1 Complications of anaesthesia
2 General complications of any operation
3 Specific complications of this operation

1 Complications of anaesthesia

Your anaesthetist will be able to discuss with you the possible complications of having an anaesthetic.

2 General complications of any operation

• Pain, which happens with every operation. The healthcare team will try to reduce your pain. They will give you medication to control the pain and it is important that you take it as you are told so you can move about as advised.
• Bleeding during or after surgery.
• Infection in the surgical wound, which usually settles with antibiotics but may occasionally need another operation (risk: 1 in 7).
• Unsightly scarring of the skin, although ankle wounds usually heal to a neat scar.
• Blood clots in the legs (deep-vein thrombosis), which can occasionally move through the bloodstream to the lungs (pulmonary embolus), making it difficult for you to breathe. You may be given treatment to reduce the risk of blood clots.
• Difficulty passing urine. You may need a catheter (tube) in your bladder for a day or two.

3 Specific complications of this operation

• Damage to nerves around the ankle, leading to weakness, numbness or pain in the foot or ankle.
• Infection in the ankle (risk: 1 in 12). You will probably need another operation and a long course of antibiotics. Occasionally, if the infection is severe, you may need an amputation.
• Failure of the arthrodesis, where the bones do not join together (risk: 1 in 12). If this happens, your ankle may continue to be painful and you may need another operation to do the arthrodesis again.
• Severe pain, stiffness and loss of use of the foot and ankle (Complex Regional Pain Syndrome) (risk: 1 in 25). The cause is not known. If this happens, you may need further treatment including painkillers and physiotherapy. It can take months or years to get better.
How soon will I recover?

• In hospital
After the operation you will be transferred to the recovery area and then to the ward. You will usually have an x-ray to check the position of your ankle arthrodesis. Your physiotherapist will help you to start walking using crutches or a walking frame, usually the day after surgery. Most people have their leg in a plaster cast and have to keep their leg off the ground. You should be able to go home after two or three days. However, your doctor may recommend that you stay a little longer. If you are worried about anything, in hospital or at home, ask a member of the healthcare team. They should be able to reassure you or identify and treat any complications.

• Returning to normal activities
Your surgeon, physiotherapist and occupational therapist will tell you when you can return to normal activities. To start with, you should spend most of the time with your leg raised up on a chair or footstool. You will be able to move around more as the swelling gets better, but do not take any weight through your leg until your surgeon tells you it is safe to do so. Most people need to have the plaster cast for about twelve weeks. You will need to use crutches or sticks until it is removed. Regular exercise should help you to return to normal activities as soon as possible. Before you start exercising, you should ask a member of the healthcare team or your GP for advice. Do not drive until you are confident about controlling your vehicle and always check with your doctor and insurance company first.

• The future
After an ankle arthrodesis you should be able to walk better and do more of your normal activities. You may have a slight limp but most people can drive a car and do other normal activities. Although your ankle will not move, other nearby joints in the foot can move a little more to make up for this. After ten to fifteen years you may get some arthritis in these other joints because of the extra load on them. If this happens, there is a small chance that you will need another operation.

Summary
If you have severe arthritis in your ankle, an ankle arthrodesis should reduce your pain and allow you to do more of your normal activities. Surgery is usually safe and effective. However, complications can happen. You need to know about them to help you make an informed decision about surgery. Knowing about them will also help to detect and treat any problems early.

Further information
• NHS smoking helpline on 0800 169 0 169 and at www.gosmokefree.co.uk
• www.eatwell.gov.uk – for advice on maintaining a healthy weight
• www.eidoactive.co.uk – for information on how exercise can help you
• www.aboutmyhealth.org - for support and information you can trust
• American Academy of Orthopaedic Surgeons at www.aaos.org
• www.thefootandankleclinic.com
• www.blackburnfeet.org.uk
• www.medicalmultimediagroup.com
• Reflex Sympathetic Dystrophy and Complex Regional Pain Syndrome UK at www.rsd-crps.co.uk
• NHS Direct on 0845 46 47 (0845 606 46 47 - textphone)
• www.eidohealthcare.com

Acknowledgements
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Local information
You can get information locally from the Patient Advice and Liaison Service (PALS) on 02380 798 498 or email PALS@suht.swest.nhs.uk.
You can also contact:

Tell us how useful you found this document at www.patientfeedback.org

This document is intended for information purposes only and should not replace advice that your relevant health professional would give you.

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